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**ELEMENTARY PRINCIPLES
OF ECONOMICS**



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TORONTO

ELEMENTARY PRINCIPLES OF ECONOMICS

TOGETHER WITH A SHORT SKETCH OF
ECONOMIC HISTORY

BY

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PREFACE BY THE AUTHORS

IN offering this text-book to teachers and students of Economics, the authors feel that a brief word of explanation and suggestion may afford help in judging the quality of the book as well as in the use of the book, should favouring judgment result in its adoption for class-room work.

It has been the aim of the authors first of all to make the book teachable. In choice and rejection of substantive and illustrative material and in its arrangement; in the form of the chapters, paragraphs, sentences, and words; in all that can affect the ease or difficulty of conveying an understanding of Economics to the beginner, this complicated quality of teachableness has been earnestly and constantly sought.

Fortunately for the welfare of the science of Economics, there is more or less disagreement among economists as to many points of theory. But manifestly an elementary text-book on the subject is not a place in which conflicting views should be presented and discussed, even if space would permit. Nor have the authors wished to use the pages of the book for the

propagation of views in which they might chance to differ from other economists. It has seemed best to regard constantly the purpose of the book as a text, and hence to subordinate individual opinion to the general good of the student. Here, as in many another question of choice, Pope's rule may well apply :

"Be not the first by whom the new is tried,
Nor yet the last to lay the old aside."

In the main, therefore, and so far as the authors have been able, they have presented the outlines of theory in the form in which they are to-day most generally accepted by economists, leaving for later and advanced study the conflicting assumptions and arguments and points of view of economists who may be paving the way for the most acceptable text-book of a coming decade.

An examination of the book will show that scattered passages, amounting in the aggregate to many pages, have been printed "solid," *i.e.* without the interlinear spaces regularly used. Such are the passages which, either from their greater difficulty or from their subsidiary character, may best be omitted by a teacher pressed for time. Moreover, for classes in which the time limits are too narrow to permit careful study of the whole text, it may be found expedient to omit Book IV., on Public Finance.

It is perhaps unnecessary to add the word of caution that the summaries and questions at the close of the

chapters may easily become a hindrance rather than a help to real thought and study if the teacher permit himself or his class to fall into slavish reliance upon them. These questions and summaries are to be used as starting-points and guides to further study and discussion.

It has been the hope of the authors, moreover, that the material carefully elaborated in the appendices may not only help to guide both teacher and class during the period of the formal study of the book, but may also encourage and direct the student in the after days of his professional or business or political life.

RICHARD T. ELY.

GEORGE RAY WICKER.

NOTE BY THE REVISER

IN adapting this book, originally prepared for American readers, for the use of English students, the purpose of the reviser has been to introduce as little change as possible either in the general plan or in the particular details of a manual, which has, for some years past, achieved a wide and deserved popularity on both sides of the Atlantic. He has been sensible that he might easily spoil what he would with difficulty improve, and that by extensive alteration he would be making a poor return for the compliment paid him

by the authors when they asked him to undertake the work. Through frequent use he has learnt to appreciate the great merits of their introduction to the study of economic principles. But he has ventured to share the hope which they have felt that by occasional variations of phraseology, by the substitution of English for American examples, and by the employment of facts and figures which will be more familiar to his countrymen, he may increase the usefulness of the book. The most material change has consisted in a fuller treatment of English development in the Sketch of Economic History in lieu of an account of industrial evolution in the United States, and in a similar treatment of Public Finance.

L. L. PRICE.

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BOOK I

INTRODUCTORY

CHAPTER I

PRELIMINARY REMARKS ON THE NATURE OF ECONOMICS

ALTHOUGH the whole book which follows is but an expanded definition of Economics, the student who is about to enter upon a study of the subject may well wish to have explained in advance, at least in rough outline, what is the field into which he is about to enter. At the outset, therefore, we should attempt to frame some idea of the nature of the science and of the group of sciences with which it is most closely connected. Later, we can return to the subject, and, by summarising the results of our study, arrive at a more complete definition.

The Place of Economics among the Social Sciences.—First of all, Economics is a social science. That is, it deals with man in his relation to society. But there are other social sciences besides that which we are about to study, and among these may be mentioned political science and sociology.

The question therefore naturally arises, How is our science distinguished from the others? To answer

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this question, we must consider more closely the different aspects under which society may be viewed. From the first, men in society have been busy in various lines of effort, which for convenience we may group as follows : language, art, education, religion, family life, social life—in the narrow sense of that term ¹—political life, and economic life. It is with the last of these eight spheres of human activity that our science has to deal. By the term “economic life” is meant, roughly speaking, that part of human activity which is devoted to the work of getting a livelihood.

A peculiar feature of these activities is that all are *collective* ; that is, they are activities which one man cannot well pursue alone. In the case of family and political life and some of the others, this is at once obvious. Careful examination shows it to be true of all. It is for this reason that the sciences which deal with them are called social sciences.

Preliminary Definition of Economics.—Economics, then, *is the science which treats of those social phenomena that are due to the wealth-getting and wealth-using activities of man.* It deals with all those facts about society that result from man's effort to obtain a living. The wealth-getting activity itself we call economic activity. The economic life, or the relations to which the economic activity gives rise, we may call by the simple word “economy.” With this understanding, we may say that Economics is *the social science which deals with the economic life, or the economy, of man.*

¹ We mean what would popularly be designated as social intercourse,—giving and receiving calls, conversation, etc. When we speak of “going into society,” we generally employ the word in this narrow sense.

The Economic Unit.—If we keep in mind this meaning of the term “economy,” we shall see that there are economies of various sorts. Thus, the economy of the ancient Greek household with its slaves and dependants is different from that of the mediæval city or of the modern nation. In this book we study the economy of the nation as a unit, with individual, household, city, and district as subordinate economies. We are coming, however, to regard the whole world as an economic unit.

The eight different human activities which have been enumerated cannot be entirely separated in thought any more than they are actually separate in real life. Thus legislation, though it belongs primarily to the province of political science, has an intimate bearing on economic life. Again, industry in Russia is seriously hampered by the frequent recurrence of saints’ days, which have therefore great economic importance; but these have primarily to do with religion, not with Economics. In the same way, economic life is dependent upon all the other groups of human activity.

Final Definition of Economics.—It is evident, then, that a complete definition of Economics must be broad enough to take note of this fact. We may sum up all these considerations in a final definition, as follows: *Economics is the science which (1) treats of those social phenomena that are due to the wealth-getting and wealth-using activities of man; and (2) deals with all other phases of his life in so far as they affect his social activity in this respect.*

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SUMMARY

- 1. Economics is a social science.**
- 2. Each great department of social life has its appropriate science.**
- 3. Economics is the branch of social science that deals with the phenomena to which the wealth-getting and wealth-using activities of men give rise.**
- 4. Economics deals also with all the other social phenomena in so far as they affect economic activity.**

QUESTIONS

- 1. Into what different groups may man's social activities be divided ?**
- 2. With which group does Economics primarily deal ? What concern has it with the others ?**
- 3. What have the different groups in common ?**
- 4. What is Economics ?**

CHAPTER II

THE PRINCIPAL DIVISIONS OF ECONOMICS

ECONOMICS is a science covering so wide a field that it has been found desirable to divide it into parts, each of which is often treated by writers in separate works or in separate volumes of the same work. It may help the student to have outlined, in advance, the divisions as they will be presented in this work.

First of all, it has been deemed well to furnish the student in the opening chapter with an idea of what the science is, and to show him, as in the present chapter, the main topics with which it is concerned. In another introductory chapter there will be a discussion of some of the fundamental institutions in our social order.

In the second place, it is thought advisable to give in a few chapters a skeleton outline of the economic history of mankind, with more particular attention to development in England, and especially to those changes which have given rise to existing economic conditions. This part of the subject is often omitted from elementary text-books, and therefore a word of explanation is appropriate.

Few students, perhaps, undertake the systematic study of Economics without having read previously

some history ; but the histories usually consulted are devoted in great part to other than economic considerations, and are written from a different standpoint from that which we adopt. They deal in the main with matters which do not primarily concern the economist, with the rise and fall of dynasties, with military and naval conflicts, with the intrigues of diplomatists and politicians, or with constitutional changes. They are not interested in trade and industry, in the growth or decline of wealth, or in the "condition of the people." It is, we think, of the utmost importance that the student should approach the investigation of present economic conditions imbued with the historical spirit. As the chapters on economic history will show, social and economic institutions are not permanent, but they are constantly changing ; and to understand aright what is, we must know whence it has developed, and, so far as we can, also whither it is tending. Moreover, the study of economic history should teach the student, as perhaps nothing else can do, that great changes in the economic condition of a nation or a class are not brought about in a moment at the command of an individual, or of a great number of men organised in a state, though both the action of the individual and that of the state are powerful forces.

The way will thus be made clearer for that which is more commonly presented in text-books under the name of Economics or Political Economy. An analysis of economic phenomena at any time shows that they may be divided for purposes of clear study into four main parts : first, those connected with man's Consumption of goods, or, in other words, with the satisfaction of his wants ; second, those connected with the

Production of goods ; third, those connected with the Exchange or transfer of goods among men ; and fourth, those connected with the Distribution of the income of society between the individuals, classes, and factors of production which co-operate to create that income. By dividing thus the general subject of economic theory, we are enabled to look at man's economic life from four points of view. The four divisions which we have indicated are usually treated under the following headings : Consumption, Production, Exchange, and Distribution. Following the practice of several recent writers, we shall discuss them in the order given.

Certain socio-economic problems of great present interest will, on account of their special importance, be treated at considerable length in those divisions of the general subject to which they bear a logical relation. Thus, under the head of exchange, we shall discuss the subjects of monopolies, monetary reform, and protection, and under the head of distribution, many of the practical problems concerning labour and wages.

Finally, the financial relations and operations of government, national and local, are of a nature so important to the welfare of the citizen, and in some respects so peculiar, that it is thought well to treat them separately in chapters devoted to the subject of Public Finance.

SUMMARY

1. For convenience of treatment, Economics is usually divided into several different fields of study.
2. The present book begins with an introduction explaining the nature and scope of the science.

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3. A sketch of economic history is given to prepare the student for a better understanding of present conditions and problems.
4. Economic theory is presented under the four general headings: Consumption, Production, Exchange, and Distribution.
5. A short presentation of the subject of Public Finance is added to give the student a more complete idea of the nature of Economics.

QUESTIONS

1. What subjects are discussed in the introductory chapters of this book ?
2. Why is it thought well to include economic history ?
3. What are the usual main divisions of economic theory ? In what order are they given in this book ?
4. Of what does public finance treat ? Why is it included in this book ?

LITERATURE

NOTE.—A comparative study of general treatises with the object of noting differences in the order of treatment will be found of service in fixing in the student's mind the nature and scope of economics.

Among these may be mentioned :

- J. S. Mill's *Principles of Political Economy* (Ashley's Edition).
- C. Gide's *Political Economy* (English translation).
- E. R. A. Seligman's *Principles of Economics*.
- A. Marshall's *Principles of Economics*.
- J. S. Nicholson's *Principles of Economics*.
- A. T. Hadley's *Economics*.
- H. R. Seager's *Principles of Economics*.

CHAPTER III

FUNDAMENTAL INSTITUTIONS IN THE EXISTING ECONOMIC ORDER

IN every civilised State to-day there are certain conditions under which men pursue their economic activities ; but they are so fundamental in their nature that we do not often stop to consider them. So deep do they lie and so long have they been established that we easily fall into the error of thinking of them as necessary to the very existence of society under any conceivable circumstance. Yet careful consideration will convince the student that this is far from being the case. Let us, then, consider in detail some of the more important of such fundamental institutions.

I. PRIVATE PROPERTY

The right of private property, for instance, is so fundamental in our modern civilisation that we hardly think of it as a creation of society, maintained only by constant vigilance on the part of the State, and subject even now to slow and gradual modification. Still less, perhaps, has it ever occurred to most of us that the right is open to question. The reason for this attitude

of mind is that people are ruled in great measure by custom rather than by the light of history and of reason. When any customary right has spread very widely and become deeply rooted in society, men fall into the error of calling it a "natural right." By this term they usually mean that the right is "established by nature," and hence is not to be called in question. But in reality there are no such rights. All true rights are rational—rights which can show good reason for their claims, and can justify their existence on the ground that they promote human welfare.

Yet it must be noted that the very fact of the long-continued existence of any social institution furnishes strong presumptive evidence that the institution has ministered to social welfare. Therefore, on those who appeal to the law or to public opinion to overthrow or to abate the force of the institution the burden lies either of showing that social conditions have so changed as to destroy the beneficent operation of the institution, or of offering very strong evidence that some other institution would better subserve the end.

Beginning of the Right of Private Property.—On looking, however, into the history of private property, we find in the first place that it has not always existed among men. The savage at first owned nothing. Doubtless, even in very early times, when the primitive man had caught or killed an animal, he considered it more or less his own, though even in such cases it was the common property of his family or tribe rather than the exclusive property of the single individual. From insignificant beginnings, the right or feeling of ownership has grown, including more and more things within its range and dividing the ownership more and

more minutely, until at last nearly everything is owned by somebody, and nearly every one owns something. It was not, however, until a rather advanced stage had been reached that land became property, and even to-day the last forms of tribal ownership of land have not everywhere given place to individual property.

Strengthening of the Right.—In the second place, it is only in comparatively recent times that private ownership has been either so exclusive or so extensive as it is at present. It is not many centuries since a Scottish clan held the right to the territory it occupied so absolutely that no chieftain, however powerful, could abridge the right. To-day, there are tracts of country in Scotland almost stripped of their agricultural population, and game, not men, are found living on these estates.

Limitations to the Right.—In the third place, we find that even to-day private property has certain sharp limitations which indicate whence it springs and from what source it obtains its validity. The State, representing the people, even now says to the individual citizen, "Thus far shalt thou go, and no farther." By its action it shows that it is the grantor of private rights, and that it may withdraw them whenever such a course will be to its advantage. Let us consider some of these limitations.

Limitations to Private Property imposed by the State in its Own Behalf.—1. *Taxation.* The first of these limitations exists in the shape of taxation of private property, which from one point of view may be regarded as simply the appropriation by the State for its own use of a part of what it has left to the private ownership of its citizens. Taxation, as under-

stood to-day, is a comparatively recent activity of the State. During the Middle Ages the right of the State to take private property for its support was stoutly opposed, and there was a strong tendency to regard all taxation as extortion. To-day the right of taxation is almost universally conceded. Taxation is the most extreme limitation imposed upon the right of private property by the State in its own behalf.

2. *Eminent Domain and Requisition.*—A second limitation exists in the right of the State to appropriate to itself specific pieces of property with direct compensation to the private owner. This right is exercised especially in time of war, as when the nation for its military needs takes cattle for the subsistence of its troops or waggons for their transportation. Such an assumption of proprietorship is known as “requisition.” But in times of peace the government often takes for its own purposes, with due compensation, land or other property, under the exercise of what is known as the right of *eminent domain*—words which in more common language simply mean ultimate ownership.

3. *Fines and Forfeiture by Government.*—Fines, imposed and collected by government under the exercise of its police power, form a third clear limitation upon the absoluteness of private property. This limitation and others closely connected with it, such as forfeiture, call for no explanation here.

Limitations directly on Behalf of Individuals.—The three limitations just described are such as the State sets up directly in its own behalf. But there are others, enforced by the State not for itself but for individual citizens. (1) The first is *the exercise of the right of eminent domain on behalf of individuals or*

corporations or companies. If a railway company is unable to make terms directly with the owner of land over which it proposes to lay its line, it can secure possession by obtaining parliamentary powers, which compel transfer of the property on compensation. It should be noticed, however, that in all such cases it is presumed that a public purpose is subserved by the company.

Moreover, there is a vast system of limitations upon the use, or rather the abuse, of private property, which are designed to prevent the individual from injuring himself or others. We need not enter into a detailed description of these limitations. Generally speaking, (2) *no man may use private property to maintain a public nuisance.* Nothing is more fallacious than the idea that the right of ownership allows a person to do as he pleases with his property. It is true that rights of private property have sometimes been so defined as to permit many abuses to pass unpunished, but it has been the tendency for the State to limit the rights so as to exclude abuses. Whenever any given right has proved generally unfavourable to the welfare of society, the Government has modified or abolished that right, or, failing to do so, has endangered its own stability.

II. GUARANTEED PRIVILEGES

Closely connected with the general subject of property is the legal arrangement whereby exclusive privileges are awarded in return for services to society. Such privileges really become a special form of private property, and have particular importance in determining the distribution of wealth. But they are not

without their importance in the sphere of production, on account of the potent stimulus which the hope of such privileges may give to invention and improvement.

Under this head come *trade-marks*, *copyrights*, and *patents*. The laws regulating *trade-marks* grant property in the design characterising some particular product. In the case of *copyrights* and *patents*, authors and inventors are secured exclusive rights in their productions for a limited period.

Most modern States proceed on the assumption that the public interest will be furthered through these exclusive privileges, and, on the whole, the policy has probably been justified by its results. Yet experience has shown that neither patents nor copyrights should be bestowed without limitations. Patents should not be given on light and trivial grounds, nor for periods unlimited or unduly long. Moreover, owners of patents should be made by law either to use them or allow them to lapse, and grant to others the right to employ them on payment of a reasonable royalty. Similarly, copyrights are carefully guarded in the interests of the public. The law in a general way aims at giving the reward of services to the author, and avoids allowing a reward for services which others have performed.

III. CONTRACT

Another fundamental institution in our present industrial society is contract. Some sort of contract lies at the basis of all associated action. That this condition of associated activity should be maintained

by the State can hardly be doubted, and yet even the right of contract has its limitations hinging upon the demands of human well-being. To-day legislation provides (1) who may and who may not contract, (2) for what purposes valid contracts may be made, and (3) under what forms and conditions they must be made to be valid. Experience justifies such regulation. Children, for example, cannot as a rule make contracts that will bind themselves, because they are not presumed by the law to have the requisite knowledge and judgment. Again, agreements which are clearly opposed to public policy, such as an agreement entered into for the commission of a crime, are invalid and would not be enforced by the courts.

IV. FREE BUSINESS ENTERPRISE

The right of setting business enterprise on foot seems another fundamental right of modern society which is nevertheless changing and changeable. It is only within the last century or so that the right has come to have so wide a scope, especially in the case of individuals joined together in various forms of combination. Many restrictions still exist, as in the matter of the liquor trade ; and the large growth of Trusts suggests further limitation as not improbable in the future.

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V. PERSONAL LIBERTY

Personal liberty or freedom, including (1) *the right to move from place to place at pleasure*, and (2) *the right of acquisition*, is an institution which we are

perhaps most likely to regard as necessary and natural under every circumstance. Yet here again we have the case of a right which has been very slowly acquired by society. Moreover, it never has been, is not to-day, and probably never can be, an unlimited right. It is the endeavour of the State to equalise human liberty, and not to make such liberty absolute, for that would be impossible. The question, then, is not whether we shall limit liberty, but how we can so limit it that we may secure a maximum of liberty for all.

The student should think this matter out fairly and deliberately, thrusting from his mind every argument based on "natural rights." Only when he has substituted the better rule of human welfare will he be prepared to study economic questions rationally and scientifically.

For the maintenance of these fundamental conditions of the existing social order which we have described we are dependent upon the State. No other instrument of society is adequate to the task. The preservation of these foundations, if they are to be guaranteed at all, can be accomplished in no other way. When the State attempts this and little more, its policy is said to be passive. When the State goes far beyond this in endeavours to promote the general welfare, its policy is said to be active.

Conclusion.—Let us remember, then, that the most fundamental institutions are not unchangeable, but that we can discover their beginnings in history, and can trace their development through manifold and unceasing alterations to their present form. Let us remember, too, that as change has marked the past, so it must mark the future; and that the institutions

which we have described, fundamental as they are, are not "natural," but derive their rational justification from their power to promote human well-being. Bearing these facts in mind, we may free ourselves from two opposing errors, from which many false views of our future take their rise. On the one hand, we may hope to escape the pessimism that springs from looking at the existing order of things as unalterably determined ; and on the other hand, we may escape that unreasoning and unreasonable optimism which belittles the importance of our fundamental ideas and institutions, and which inconsiderately hopes to change these in the twinkling of an eye, by the simple expedient of the vote of a majority.

SUMMARY

1. There are certain ideas and institutions in our social order which are so fundamental that we come to regard them as "natural" and necessary.
2. Among these fundamental institutions are private property, guaranteed privileges, contract, free business enterprise, and personal freedom.
3. Far from being natural or necessary to every state of society, these rights have always been limited, have always been changing, and have their origin and justification in social expediency.
4. History warns us neither to overestimate nor to underestimate the importance of these institutions. They may be changed, but they cannot be changed easily or quickly.

QUESTIONS

1. What is private property ? Why is it often held to be a right which is not open to question or discussion ?

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- 2. What is the basis of human rights ? Are any of them exempt from the need of examination or justification ?**
- 3. What is the historical origin of private property ?**
- 4. What limitations does the State set to private property ?
Is the present tendency toward an increase or a decrease of these limitations ?**
- 5. Ought private property to be retained ? If so, why and how far ?**
- 6. What is a trade-mark ? A copyright ? A patent ? Discuss their purpose and results.**
- 7. What limitations are properly set to the right of personal freedom ? Of what does the right to personal freedom consist ?**
- 8. Discuss the idea of "natural rights."**
- 9. From what two opposed errors ought a true idea of fundamental institutions to guard us ?**

BOOK II

A BRIEF SKETCH OF ECONOMIC HISTORY

CHAPTER I

INTRODUCTORY

What Economic History Is.—In beginning the study of economic history it will be useful to recall what has been said in a preceding chapter on the nature of the subject now before us. The history of literature, the history of government, the history of religion, and other histories which the student can readily call to mind, have one thing in common: they are all of them histories of man. Each of them, however, treats of man in one particular sphere of his activities. It is the same with Economic History. Its subject is man, but it deals primarily, not with his government or his worship, but with his efforts to obtain a living. Many who have held a narrow view of our subject have objected sneeringly that it is but a "bread and butter" science. Even if this were a just view of the subject, Economics would still be worthy of our most careful study. But, as a matter of fact, it means much more than "bread and butter." It is plain on a moment's reflection that every kind of activity, however sublime, depends to some extent upon material

things. And so this subject of ours—man in his effort to acquire and to use material things, to satisfy his wants, or, in other words, to get a living—is of interest to everybody, and is closely connected with every kind of human effort.

General Survey.—At the beginning of our review of the history of man's economic efforts we are struck by the fact that the manifold ways of getting things may after all be reduced to two: man must either *find* or *make*. Of course, the two ways are combined in varying proportions, and in our own experience the two are constantly shading into one another; but for the purpose of clearness now we may draw the distinction. Uncivilised man, then, *finds* the things he uses; civilised man adds to *finding* the art of *making*. Indeed, *material civilisation consists largely in wanting many things and in learning how to make and use them.*

The economic activity of man before the dawn of recorded history is enshrouded in so much mystery that we can do little more than guess what it was. We have evidence to show that prehistoric man obtained his material goods, as the beasts do now, by taking possession of natural products, exercising little or no control over nature, and protecting himself from the elements only by caves or by the simplest of contrivances.

Historical Stages.—The period of civilisation just mentioned is something so remote, something about which our knowledge is so uncertain and so fragmentary, that we are scarcely able to treat it as a separate stage of real economic evolution. We may, therefore, pass directly to a study of the regular stages, as they have commonly been described and distinguished, beginning with the time when men *had learned to kindle fires, to*

eat meat, and to live in some kind of political communities, however crude. Starting thus, we may conveniently divide the course of man's economic development—regarding it from the standpoint of his means of procuring goods—into five stages, as follows :

- (1) The hunting and fishing stage.
- (2) The pastoral or nomadic stage.
- (3) The agricultural stage.
- (4) The handicraft stage.
- (5) The industrial stage.

The evolution of economic society may, from a somewhat different but not antagonistic point of view, be divided into the four following stages :

- (1) The stage of independent economy.
- (2) The stage of town economy.
- (3) The stage of national economy.
- (4) The stage of world economy.

Again, looking at the same development from the standpoint of man's ways of exchanging goods when produced, we may similarly distinguish the three following stages :

- (1) The stage of "truck" or barter economy.
- (2) The stage of money economy.
- (3) The stage of credit economy.

Still again, we may view economic evolution from the point of view of wage-earning labour, going back to the period when enemies taken in battle were slaughtered, and passing on to the time when the lives of the conquered were spared in order that the victors might hold the vanquished as their slaves. We have the four following stages :

- (1) Slaughter of enemies taken in battle.
- (2) Slavery and serfdom, along with some free labour, the latter being governed by custom operating through contract.
- (3) Free labour, regulated by individual contract, but with

increasing resort to group contract, and with legal protection of labour. Slavery gradually disappearing.

(4) Collective bargaining, regulated increasingly by statute.

These classifications may now be brought together in a single table, in which the historical relation of the various classifications will be shown, the first classification given—that in the second column of the table—being regarded as the principal.

ECONOMIC STAGES

I. STAGES IN THE HISTORY OF LABOUR.	II. STAGES IN THE HISTORY OF PRODUCTION.	III. STAGES IN THE HISTORY OF THE DEVELOPMENT OF THE ECONOMIC UNIT.	IV. STAGES IN THE HISTORY OF TRANSFERS OR EXCHANGES OF GOODS.
1. Slaughter of enemies.	1. The hunting and fishing stage. 2. The pastoral stage. 3. The agricultural stage. 4. The handicraft stage.	1. The stage of independent economy.	1. The stage of barter economy.
2. Slavery and serfdom, along with free labour, regulated by custom, operating through contract.			
3. Labour regulated by individual contract, with increasing use of group contract, and legal protection of labour. Slavery disappearing.		2. The stage of town economy.	2. The stage of money economy.
4. Collective bargaining, regulated increasingly by statute,			

It must not be understood that these stages are in any of the classifications distinctly or sharply separated, and that we can fix dates at which men consciously abandoned one way of obtaining goods, or exchanging them, and passed to another method. The transition from one stage to another is slow and almost imperceptible. Those students of this book who have studied botany or zoology will understand the illustration when we say that the stages shade into one another as do the varieties of closely related genera in the case of living organisms. Moreover, it must not be understood that all of the features of an earlier stage disappear when men enter on the newer way. In many cases all of the features of the old survive and even have an increased importance in the later stage. Thus trade and commerce are to-day pursued on a far larger scale than they were in the handicraft stage; but since then new and important features of economic life have developed to give a new character to the age, and we seek to indicate this change by some distinctive title. To-day, in England, or at least in Europe, we can find examples of nearly all the stages of evolution that have been mentioned. Barter, or truck, is still the fashion in some districts or occupations or for some purposes, and, indeed, there are comparatively few places on the Continent in which credit transactions have, as with us, taken in the main so completely the place of money dealings. It is specially interesting to observe, in the United States, that, owing to the progressive Western movement of the population of that country, the stages in the history of man's productive efforts appear in regular order as we move from west to east. Thus, the country of the frontier

is still occupied by hunters and trappers ; next are great stretches of land which are almost entirely devoted to grazing ; farther east, agriculture predominates ; trades and commerce are active especially in the country east of the Mississippi ; manufacture on a large scale is found especially in the North Atlantic and North Central groups of States ; while finally the large industrial combinations which mark the latest step in development are confined, at least as far as their legal residence is concerned, to the Atlantic seaboard.

Our study of the history of man's economic development may conveniently take the form of a study of the various stages which have been mentioned, and more especially of the stages in the history of man's productive efforts.

SUMMARY

1. Economic history is the history of man in his efforts to get a living ; that is, to get the things needed for all his activities of body and of mind.
2. Uncivilised man finds things ; civilised man makes them.
3. The history of man from the standpoint of his productive efforts may be divided into five stages : the hunting and fishing stage, the pastoral, the agricultural, the handicraft, and the industrial stage.
4. Other subsidiary classifications are based upon the history of transfers or exchanges, the history of labour, and the history of the development of the size of the economic unit.

QUESTIONS

1. What is included in the term " living " ? Mention some economic elements in religious work. In education. In politics.

2. What two ways are there of getting things ? In which way can society get more ?
3. What do we know of the economic life of prehistoric man ?
4. What are the five stages of economic progress from the standpoint of production ? The three stages from the standpoint of transfers or exchanges ? The four stages from the standpoint of labour ? The four stages from the standpoint of the size of the economic unit ?
5. What can you say about the distinct separation of these stages ?

CHAPTER II

EARLY STAGES OF INDUSTRIAL DEVELOPMENT

I. THE HUNTING AND FISHING STAGE

General Characterisation.—In the first stage of man's economic development, nature is the great factor of production. There is little labour and less capital. Man contents himself with what nature gives him, his labour taking the form of appropriating for himself these gifts. He has not progressed far in subjecting animals to his will ; still less does he attempt to improve useful animals by means of breeding. Transforming natural products by his handicraft is but an insignificant part of his activity. Not even does he store up goods in time of abundance against a future time of dearth. The American Indian, where he has not been elevated by contact with a higher civilisation, is a good illustration of this stage of economic progress.

Economic activity in this stage is in a high degree *isolated*. Hence this stage, together with the two succeeding stages, is said to belong to the period of *independent economy*. In other words, the work of getting goods is not carried on, as with us, by great groups of men scattered in many countries, but it is done in the main in the single family, each family

producing most of the things which its members consume. For this reason, too, there is little exchange or transfer of goods, though there is no unwillingness to make such exchanges if an opportunity offers to secure thereby something new and attractive.

There being little exchange of products or division of labour, it follows that there are no economic classes and no industrial conflicts. The greater part of property, including all land, is the common possession of the social group, private property being confined to fighting weapons, household goods, and the immediate rewards of labour.

Hunting Tribes.—Although we have grouped the hunting and fishing tribes together as being upon the same plane of economic evolution, we can find certain clear differences between those who live primarily on the products of the chase and only secondarily upon fish, and those who reverse this order. Among hunting tribes we find the work and life leading to a high development of such qualities as cunning, endurance, and bodily strength, but not to a development of technical skill nor to a reflection upon the processes of nature. Their condition of life prevents the possibility of any but a sparse population. It has been estimated that in a population living solely upon the products of the chase each hunter requires for his support more than fifty thousand acres, or seventy-eight square miles, whereas in the county of Lancashire, in 1911, 4,825,009 persons were living on an area of 1,299,539 acres; in the West Riding of Yorkshire, 1,773,529 acres were occupied by 3,045,377 inhabitants; and London alone, with an acreage of 74,816 acres, contained a population of 4,521,685 people. It follows from this

need of large territories that war becomes an economic necessity whenever there is not an abundance of unoccupied land. This same condition of things supplies one of the causes of cannibalism. The pressure of increasing numbers bringing the people continually to the verge of starvation, they fall little by little into the custom of eating enemies taken in war.

Fishing Tribes.—As might be expected, primitive tribes of fishing people are more peaceable than are the hunting tribes. Their population is denser, both on account of their more pacific disposition and from the fact that a smaller area is sufficient for the support of a given number of people engaged as they are. Having less need of frequent migrations to seek new food resources, they naturally form larger accumulations of capital. They build dwellings of a more permanent character, and construct boats and fishing implements. On the whole, we may say that the power of man over nature is greater among fishing than among hunting tribes. Primitive fishing tribes can now be found only in the frigid zone.

II. THE PASTORAL STAGE

General Characterisation.—Between uncivilised man, who uses what he *finds*, and civilised man, who *makes* what he wants, there is middle ground. The man of this middle stage neither depends alone on what he can find, nor to any great extent makes things, as we commonly conceive the process. But he rather *raises* things; in other words, he has learnt to a limited extent to give direction to the forces of nature. He has learnt to produce, but he still lives chiefly on the raw

materials he has coaxed from nature, ignorant how to make them up. He is learning to labour and to save. To be sure, he acquires very early the art of forming a few simple tools like bows and arrows and primitive stone implements ; but, with these rare exceptions, it is worthy of note, that, as man learns to subdue nature, he begins not with dead nature—not with inanimate things—but with living or animate nature ; he uses, not metals, but animals and plants, and is able to increase their amount by artifice. Moreover, of these two classes of living things, he first subdues the higher form of life—that which resembles more nearly his own—and, as a rule, it is not until long afterward that he learns to exercise any considerable control over plants.

Changes that mark the Stage.—When hunting tribes cease to depend for food solely upon the killing or capture of animals, and turn to the art of taming and breeding them, such tribes are entering upon the second great era of economic progress, which has been called the pastoral stage. Even in the hunting stage there lay the beginnings of such progress, in the taming of dogs and horses for hunting ; but when extensive pasturing of animals for food and clothing takes place, the pastoral stage has well begun. Marked features of the earlier stage, however, still continue. Thus, while man now lives chiefly upon his flocks, he still leaves the flocks to live upon what they can *find*. So, while he no longer needs to wander in search of his own food, he must nevertheless migrate for the food of his flocks. Cities are therefore as yet impossible. Moreover, though the land will now support many more inhabitants than before, much ground is still needed for the

necessary pasture, and tribes and families roaming far and wide to search for desirable situations frequently come into sharp collision. According to the calculations of the celebrated geographer, Professor Ratzel, nomadic populations require, on an average, about a square mile for every two to five persons. Wars, therefore, continue, and keep down population, but there is one important change. The victims of war for a long time still may be generally slaughtered, the women and children being more frequently spared than the men; but men who have flocks to furnish food in time cease to eat human flesh. Later captives come to be recognised as of use in serving their captors, and thus slavery succeeds cannibalism and slaughter. Slavery could not have been extensive in the earlier stage, because slaves without weapons would be of very little use when women performed nearly all the drudgery, and, on the other hand, slaves with weapons would have seemed a constant menace to their masters.

Migrations.—Wanderings of whole peoples were very common, due in some cases to the exhaustion of old feeding-grounds, and in others to the natural increase of numbers when a tribe had been long established in one place. It was such overpopulation that brought about the warlike incursions of barbarian hosts into Europe from the heart of Asia, and the migrations of the peoples in the early centuries of the Christian era.

Little Land Ownership.—It follows from what we have already said that there was little ownership of land in the sense in which we now regard ownership. Tribes as a whole would lay claim to certain districts for a time, and would try to keep other tribes from pasturing there. But individuals of the tribe would own no land,

or at most very little. The notion of land ownership develops only when the land itself becomes more useful, and when the fruits of its fertility can be more directly appropriated than could happen when it was used for pasturing.

Private Property.—Yet private property in other things than land had now become not uncommon. Even great accumulations of wealth took place, consisting of flocks, gold, silver, finely woven fabrics, and precious stones—in short, such things as appeal very early to the barbarian taste for showy ornament, and may be transported from place to place with relative ease. We also find, even at this distant time, great differences in the wealth of individuals, the rich and the poor being contrasted sharply with one another.

Little Commerce.—In spite of the growth of wealth among men, there was little exchange or commerce. The reason for this is not far to seek. In order to have commerce, not only must there be some wealth, but it must be diversified. There is little to be gained by exchanging ox for ox. Of course, in the other classes of goods to which we have referred, there was some little traffic, but trade in the modern sense of the word can hardly be said to have existed. The economy of each large family or household was in the main sufficient to itself.

The Origin of Exchange.—Such trade as did prevail was carried on by barter, or by the still earlier mode of exchanging gifts. It is an interesting fact that barter, the earliest form of regular exchange, grew originally from the practice of making presents. Among many primitive peoples to-day, barter is not recognised as an institution, but when one person presents a gift to

another, he waits expectantly for a gift in return, and, when he receives it, he scans it closely to be sure that he has got an equivalent for his generosity.

III. THE AGRICULTURAL STAGE

General Characterisation.—Man's next accomplishment, which carries him a distinct stage farther in his development, is of immense importance. Already knowing how to manage animals to advantage, he now learns to "manage" plants, and to raise them at will. Agriculture, as a means of support, is thus added to the keeping of flocks and to the chase. A greater variety of food is in this way made possible for man, who now ceases his wandering life. A much denser population is the result. Professor Ratzel's calculations indicate that the early agricultural populations were about six times as dense as the pastoral populations. With a denser population remaining permanently in fixed abodes, new relations spring up among men, new duties, new arts, and new possibilities of civilisation. It is in these conditions that the political whole which we know as a nation finds its birth.

Land Ownership.—With growing density of population and increasing permanency of settlement follows a third result—the private ownership of land. Successful cultivation of the soil requires detailed personal care and attention, and some sort of division of the land was hence seen to be necessary. The first parcelling of the land, however, by no means gave rise to permanent private ownership. The tribe, or community, still owned the land, as is the case to-day with

the Russian village community known as the Mir, and its division was recognised as temporary for purposes of convenience.

The Origin of a Labouring Class.—Perhaps the most important result of the change which produced the agricultural stage was the growth of slavery as an institution. As we have said, slavery had its beginning in the preceding periods, but it is only in the agricultural stage that it becomes an important, almost a fundamental, economic institution. Tending the herds did not call for persistent labour, but the business of tilling the soil is work undisguised, and primitive men were not fond of work, nor had they been trained by long usage to submit to such an unpleasant habit. It is not strange, then, that they should have saved the lives of men conquered in battle with the design of laying upon them the task of tilling the soil. This seems to us perhaps a poor reason for being humane, but where humanity is the result, a poor reason is better than none. Free labour has indeed been possible only because for century after century certain men laboured not from choice but from necessity. As they became free, labour itself also was free, and the habit of labour had then been fixed in the race.

Commerce.—With every increase of wealth the tendency to trade also increases, but as yet the occasion for trade was slight, as men's wants and wealth were still everywhere much the same. Such trade as existed ministered chiefly to the love of luxury, and this long continued to be the case. It was probably in part for this cause that the ancient philosophers and the early fathers of the Christian Church displayed great hostility to commerce.

Laws and Customs reflecting Ideas.—There remain to be noted the change and enlargement in men's ideas, as reflected in their laws and customs. The Mosaic code, framed to govern a people in the pastoral and agricultural stages, furnishes perhaps the best source of information on these new ideas. Even before this time there had been numerous customs regulating life, but in the Mosaic code we are struck by the great increase of duties and restrictions which were then recognised. With fixed habitation had arisen the State, with its justice, its guidance, and its protection—its many *thou shalt's* and *thou shalt not's*; and all this occurred because men had become permanent neighbours, and therefore felt now the need of a definite understanding to keep each one from trespassing voluntarily and *involuntarily* on another's liberty. If men are to live close together, and accumulate property, and enjoy it in peace, there must always be general agreement of the many, and vigorous compulsion of the few.

"Neighbour" and "Stranger."—It is worthy of notice, however, that for a long time duties and laws were chiefly recognised as being applicable at home. Beyond the boundaries of the tribe or nation they were scarcely considered to be binding. Thus, for instance, in the early Germanic communities, when the scattered tribes were still small and separated by unoccupied land, the members of each tribe lived in relations of brotherhood, holding property in common and closely guarding all mutual rights. But when different tribes came together to trade on the neutral ground, or *Mark*, all kinds of sharp practice were deemed admissible. Things not to be thought of at home here passed unquestioned.

Duration of the Agricultural Stage.—The agricultural stage lasted for centuries among many peoples. In the development of the civilisation of Western Europe, it did not evolve into a higher form until the more advanced period, when the great movement toward the building of cities began. Of course, it has not been displaced wholly by subsequent stages of economic life, but only modified—unceasingly modified—with the lapse of time. The marks of the earlier stage are clearly discernible even in later industrial life.

IV. THE HANDICRAFT STAGE

General Characterisation.—We have said on an earlier page that real material civilisation begins with making things ; it is with the stages in which men make things that we have now to deal. Speaking very generally, we may say that men make things in one of two ways : by the hands *directly*, sometimes assisted by simple tools ; or by the hands *indirectly*, through the mediation of machinery, generally propelled by other than men's power. As was natural, man in his progress came first to make things with his hands directly, learning later to quicken and improve his work by the use of machinery and the employment of power produced by animals or wind or steam. The very word "manufacture," which we use to represent the idea of *making things*, meant in earlier days *making things by hand*, as the Latin words from which the longer word is formed indicate. As the word has since received an extension of meaning, we may say that there are two kinds of manufacture : (1) hand

manufacture, and (2) power manufacture. Hand manufacture is the foundation of the fourth stage.

It goes without saying that labour and capital—the fruit of past labour used for increasing the product of the labour of the day—now grow more important than they had been before. Man by his skill transforms raw materials: he learns to weave fabrics and to fashion things in wood and metal; to use inanimate, as well as animate, nature. The chief results of this will be seen more clearly as we discuss them under separate headings.

1. *Trades*.—Skill in doing comes from repeated doing. “The Jack of all trades is master of none.” With the appearance of manufacture, therefore, self-interest leads men to specialise so far as the needs and circumstances of the time will permit them to act thus with profit. Hence, in this stage, we find division of occupations, whereby some men become blacksmiths, some shoemakers, some weavers, etc. Many surnames, such as Smith, Baker, Joyner, Taylor, owe their origin to a time when such specialisation was more noticed than at present.

2. *Commerce*.—We have more than once mentioned the fact that there can be little commerce so long as men are mostly engaged in the same kind of business. But when communities become larger; when their wants grow more various and their goods consequently of greater extent and diversity; when, finally, it becomes possible for men to specialise in their occupations, commerce becomes not so much a result as a necessary incident. When each man has his trade and makes articles of one kind alone, he will neither want all the things that he makes, nor make all the things

that he wants. He must attempt exchange. And so, whenever manufacture develops, we find trade growing up beside as a necessity. We cannot say that manufacture results in commerce, nor that commerce results in manufacture. We must rather look upon the two as mutually causing one another, their joint cause lying in the growing culture and wants of mankind. This stage, on account of the appearance of commerce, is frequently designated as the trade and commerce stage, but it may also be designated more simply as the handicraft stage, inasmuch as it is dominated by handicrafts, and commerce has at this period far less significance than it gains in modern times.

With the growth of commerce, some men find it profitable to spend all their time in exchanging goods which other men make, earning their compensation by saving the makers the greater time and trouble which direct exchanges would necessarily involve. Moreover, different countries also find an advantage in exchanging their respective products, and here again men of special training are needed to carry on the work of exchange. Such commerce as arises during this stage between different countries or communities is greatly handicapped by the inadequate means of communication; but where goods can be carried by water, commerce, even in bulky commodities, assumes considerable proportions.

3. *Money.*—Of course, for such a general system of exchange, barter was entirely inadequate. Among primitive peoples, barter is the only mode of effecting exchanges, and travellers among savage tribes tell amusing stories of the difficulties experienced in securing goods by such a system. We cannot here enter into a

full discussion of the limitations of barter, but we may speak of one of the chief requisites for any exchange by barter—the need of what one writer has called *coincidence of desire*. By this expression it is meant that before an exchange can take place by barter, the man who has a superfluity of one good and wants another, must find a second person whose superfluity and want are reciprocal to his own. The rarity of such coincidence is itself sufficient to prevent barter from serving as an efficient method of exchange. In the course of time, as men bartered with one another, it was found that certain things were more generally acceptable than others, and that some one thing or some few things were most generally acceptable. These generally acceptable goods have varied in different stages of economic development and in different places. Among primitive peoples, articles of adornment have usually taken such a place. As people learnt that such articles were generally acceptable, they would use them more and more in their exchanges, and the frequency of use would in turn increase the recognised utility of their possession. Without going further with our explanation, we may say that, *spontaneously and in large part by unconscious processes, there has always grown up among every people some one generally accepted and recognised medium of exchange or some few things that have been so recognised. As this medium grew in acceptability and cognisability, it took more and more the character of what we know as money.* It was during the handicraft or trade and commerce stage that gold and silver, already much used for this purpose, secured that universal recognition of their desirability in exchange that made them money.

4. *Cities*.—Among those employed in agricultural pursuits, there is a tendency to form village communities, but in the agricultural stage such communities cannot become populous, because agriculture requires a scattered population. Manufacture, on the other hand, has an opposite tendency. If men are to live by their trades and by exchanging with one another, it is important that they should be near to one another. Cities, situated conveniently for commerce on the coast or on great rivers, develop whenever men learn to manufacture.

5. *The Gild System*.—New forces coming into society do not take care of themselves. So the trades had to organise in order to reduce their business to some kind of order. Each trade had its gild, which specified in detail how the business should be carried on, how many should be admitted to it, and how it should be learned. Where, as was usual, the gilds controlled the government of the cities, these rules were also sanctioned by the law.

6. *Political Freedom*.—Throughout most parts of Europe the agricultural stage culminated in the feudal system. Under that system the feudal lord occupied a commanding position, very like that held by a patriarch in an earlier pastoral state, and owned the land occupied by the tribe or people. The tillers of the soil had become serfs, and, though they could not be sold away from the land, they were obliged to stay on the lord's domain and work for him for such reward as he chose to give them, or such as custom and public opinion, powerfully backed by the Church, had established. Slavery thus gave way to serfdom. The trading cities sometimes became opponents of the great feudal estates. The lords, feeling their

power threatened, sometimes opposed the cities. And so there were quarrels and agreements in places. Finally the cities conquered and won charters for themselves. These cities were then free cities, and serfs who fled to them were accepted and made free. Thus feudalism began to break down in the towns at least, and with the disappearance of slavery and serfdom, man's progress in the art of getting a living resulted in another great step toward liberty and humanity.

SUMMARY

1. Uncivilised man gets his living by hunting or fishing, or by both.
2. Economic activity in the earliest stage is largely isolated.
3. Hunting tribes differ in character from fishing tribes, owing to the difference in the conditions of their life.
4. The domestication of animals, leading to the pastoral stage, assures subsistence, introduces slavery, and increases wealth.
5. The pastoral stage has little landownership or commerce, and is marked by frequent tribal migrations.
6. In the agricultural stage, man adds the "management" of plant life to his earlier management of animal life, thus making his existence more secure and population more dense.
7. Cultivation of the soil fixes residence, extends law and custom, and develops tribal ownership of land and a distinct labouring class.
8. Economic civilisation, which begins with the *making* of things, appears in the handicraft stage, called also the trade and commerce stage.
9. In the handicraft stage, money is regularly used, trades are developed and organised in guilds, and cities, rising from the new commerce, become free and break away from the feudal system.

QUESTIONS.

1. What is the economic mark of savagery ? How do hunting and fishing tribes differ ? Why ?
2. What is the economic mark of semi-civilisation ? What stages have this as their special character ?
3. What other economic changes from the earlier stage are found in the pastoral stage ?
4. What is the fundamental difference between the agricultural stage and the pastoral ? What economic results flow from this difference ?
5. What is the economic mark of civilisation ? What stages have this special character ?
6. What is the relation between trades and commerce ?
7. What great economic institutions grew out of trades and commerce ?

LITERATURE

Bücher, C. : *Industrial Evolution*.

CHAPTER III

THE INDUSTRIAL STAGE

WE come now to the last of the stages in man's economic development. Inasmuch as this last stage is the one in which we are living, it may be well to give to it more detailed attention than that bestowed on the preceding stages. After a general description accordingly of the characteristic differences between the industrial stage and the stage which preceded it, we shall, sketching in outline the course of English Economic History, make particular reference to the movement by which the industrial stage was ushered in. For it was in England that that significant movement began, which has been followed in other countries.

The industrial stage has shown three distinct phases. The distinguishing characteristic of the earliest phase—say from 1760 to 1830—was development of machine industry and the application to it of steam power. From about 1830 to about 1870 the distinguishing characteristic of industry was the development of steam-power transportation. From the latter date to the present, perhaps the most striking fact in industry has been the concentration and integration of capital in the fields of manufacture and transportation.

The Industrial Stage. General Characterisation.—

As we have said, man may manufacture by hand or by power. It was a great step forward when man learned to manufacture at all; it was a transformation of society when man learned to manufacture by power. Mere human muscle is an insignificant force compared with the external forces of nature, and man's greatest accomplishments when he depends upon his own unaided efforts are relatively unimportant. But man has more brains than any other creature, and progresses by their use.

Here, as in the preceding chapter, it will conduce to clearness if we analyse the situation and show the characteristic contrasts between the industrial stage and the former stage of economic development.

1. *Relation between Classes.*—Under the old system of hand manufacture, each master in a trade worked by himself or with a few others, apprentices or journeymen, who in time would normally become masters themselves. Hence we may say that men in the full possession of their trade worked on their own account and *owned what they made* as well as *the means of manufacture*. When prices rose, the benefit went to them. Strictly speaking, there were no class divisions in manufacture, an apprentice or a journeyman being simply a master “in the making,” living on terms of intimacy in the master's family, and in many cases marrying the daughter of the master and later succeeding to the business.

Rise of Factories.—But it is manifestly impossible for every workman to own an engine and elaborate manufacturing machinery. The result of the application of steam power to manufacturing, therefore, was

that a few men, more enterprising or wealthier than the rest, made the experiment, bought high-priced machinery, employed workmen, and quickly distanced their conservative competitors who opposed the change. Under these conditions, as we can now see, the *factory system* was bound to grow and to supplant the old system of *house industry*. Those who resisted had to go to the wall. They did not enjoy the process nor were they patient under its operation ; but at length, their fortunes wasted, their business ruined, their hope of successful hindrance gone, they yielded and sullenly sought places as workmen in the new factories.

Before this great industrial change, employer and employed were not, as we have said, sharply or permanently divided by class distinctions. Living and working together, apprentice and master had that mutual respect, which came from the remembrance of his own apprenticeship on the part of the master, and the assurance of a future position of independence in the breast of the apprentice. Now we have two distinct industrial classes, with interests that seem irreconcilable, and between them is fixed a gulf which in an old society comparatively few men can hope to cross.

2. *The Wages System*.—Formerly the workman had what he made and sold it for what he could get. This was natural under a system of divided labour in which each man made one article and that a whole article. But in the more efficient processes of production that obtain to-day, the need has come of a much greater division of labour, or rather combination of labour. Now, it requires many men working together to make a single article efficiently. But when a group of men have

made a case of shoes, of which one has cut out the soles, another has made the heels, etc., who can say how many shoes the individual workman has made? Then, too, the employer has furnished materials and machinery and has assumed the risk of loss. He must be paid. How many shoes shall be his portion of the whole? Some way out of the difficulty must be found. As a matter of fact the way adopted was the simplest and perhaps the best. The employer takes all the shoes, and gives the workmen for their labour, not the actual product of their labour, but a stipulated wage which is represented to be an equivalent. And thus has grown up the modern "wages system" of employing labour.

3. *Competition*.—Under the old gild system of manufacturing for purely local markets, prices, as well as many other elements of industry, were regulated by custom or by law. The man trying to undersell his neighbour would have been an object of public contempt and hatred. Men sometimes entered into rivalry or competition to see who could make goods of the best quality, but even here custom and law sometimes came in and reduced all to a dead level by determining what the quality of the commodity should be.

But with the growth of great markets in the industrial stage all this was changed. Factories now competed not for the trade of a single city or county, but for that of a whole country or of the world. The producers were no longer neighbours living in close and friendly intercourse, but great hostile businesses often situated in different parts of the country. The earlier stage had been prevailing a period of "town economy"; the new stage was a period of "national economy,"

which in our own time has developed into something very like a "world economy." Under such conditions, competition once begun must go on becoming fiercer and still fiercer. It was not a competition in well-doing, but in money-making.

The struggle had its good results. It was what men needed to stimulate their energy and enterprise. Invention followed invention ; business rapidly centred in places where it could be carried on at the greatest advantage ; labour processes were divided and subdivided as the increase of machinery and the growth of markets rendered division profitable, and by these and other means the cost of production was constantly lowered.

Thinkers of the time not unnaturally were profoundly impressed by the rapid increase of wealth due to competition—or rather to freedom of industry and enterprise—as well as by the irksomeness of the old gild restrictions, to which appeals were being made by those who wished to curb the new movement. They overlooked the evils of unrestricted freedom, and in consideration of its benefits concluded that the State should not try to guide industry, as it had before been doing, but that industry needed only to be left alone to achieve the grandest results. It will be necessary later to note some of the consequences of the attempt of the Government to follow this principle.

4. *Banking and Credit.*—All great movements are complex, the various parts being mutually cause and effect, one of another. The preceding stage had developed money ; the industrial stage has developed credit. Credit has been in part the result, as it has been in part a cause, of the other great changes which

characterise the age. Money is still used as the most common medium in retail trade and in small transactions generally, but in large transactions it has been displaced in great measure by the various instruments of credit, such as cheques, drafts, and bills of exchange. Moreover, to secure a proper organisation of credit, it has been necessary for society to develop the system of banking as we know it to-day. Thus one great improvement produces others and is in turn produced by them. In 1750 Burke declared that "out of London there were hardly a dozen banks." In 1784, there were less than 150 banks in England; in 1792, they numbered about 350, but to-day many of the banks and bankers are very large amalgamations with hundreds of branch establishments in many different districts, and the total value of the cheques passing through the London Clearing House in 1911 was £14,613,877,000.

5. *Transportation*.—Before the beginning of the industrial stage, the problem of moving things was far less important than it has since become. Not much could be moved long distances by land while only packhorses and waggons were known. Often, too, the roads were such as prevented the best results even from such a mode of locomotion. Transportation by land being so difficult, commerce depended then, as always before, chiefly upon water. Sailing vessels, though slow, could carry even bulky commodities between places connected by water, and large cities were therefore invariably seaports. We have become more independent of waterways furnished by nature or by art. Important cities can now grow up miles away from navigable rivers or the sea-coast, though

the importance of water communication even to-day is attested by the slight proportion of cities that are so situated. In all this we see that civilisation is marked by man's increasing domination of nature.

6. *Moral and Legal Restraints*.—Always in past stages of economic development we have seen a sharp distinction drawn between neighbours and strangers. The family and neighbours have formed a constantly widening circle, and have throughout been protected by detailed law and custom ; strangers, on the other hand, were exposed to whatever treatment might be considered advantageous. Indeed, the word "stranger" in many languages even had the added meaning of enemy. It is characteristic of the industrial stage that the distinction between neighbour and stranger is no longer clearly defined. It may be asked, Have all men, then, become brothers, or have they all become strangers and enemies ? Few will claim that men in their *business dealings* are brotherly. Yet, if we look at the whole of the industrial stage, we shall have reasons for believing that the change which has been taking place has been to make neighbours of those who were strangers and enemies. The great and sudden widening of the circle of neighbours was naturally accompanied by a weakening of the feeling of neighbourliness. But in our own time more than ever before there has been a conscious effort to strengthen this feeling of neighbourliness or brotherhood, and to widen the circle even beyond national lines. Humanity, on the whole, has not been lessening but growing.

SUMMARY

In the industrial stage men make things by machinery. The result is separation of classes, keen competition, a development of money and credit, and improved facilities of transport.

QUESTIONS

1. Characterise the phases of the industrial stage.
2. "Competition is neither wholly good nor wholly bad. It is a force to be regulated; it must not become our master." Discuss this statement.

CHAPTER IV

A SKETCH OF ENGLISH ECONOMIC HISTORY

A. BEFORE THE INDUSTRIAL REVOLUTION

Economic History is of Increasing Importance when the Industrial Stage is reached.—The opening chapter of “economic history” belongs to an age when men, meeting in markets, first exchanged their surplus produce; and the time before such rudimentary business intercourse as this arose has been aptly distinguished as “pre-economic,” to be treated, if at all, in an Introduction to the narrative. Yet, after this crucial development has been attained, a long time must still elapse before the records of a nation’s life devote much space to economic facts or forces. Other influence and events have hitherto been more conspicuous and important. It is on this account that special attention should be given, and will be here accorded, to the “industrial stage.” Even the general historian, it may be observed, studying Englishmen and their affairs from 1760 onwards, has been compelled, consciously or unwittingly, willingly or involuntarily, to bring economic as contrasted with political or military matters into greater prominence than that secured in earlier periods. For commerce and industry then

became no less potent factors in English life than the purposes or acts of warriors or politicians. The latter, indeed, were forced to take into account these factors in their plans and conduct. They could afford no longer to disregard the "condition of the people." If economists themselves began their systematic studies, as in Germany and France, in the persons of Cameralists and Physiocrats, with a desire to meet the need for revenue of the sovereigns, whose servants they were, professional statesmen, to whom the same problem must necessarily be an immediate and constant concern of their craft, could not in the eighteenth and the nineteenth centuries avoid treading in these steps, and exploring with a closer scrutiny than their predecessors had bestowed, the sources of those revenues in the wealth or poverty of the taxpayer. The younger Pitt was proud to confess himself a pupil of Adam Smith, in whose *Wealth of Nations*, published in 1776, an unequal contest was still waged between the practical art of finance and the theoretical science of Economics. And, after the serious disturbance of the Napoleonic War had passed away, the chief problems both of legislation and administration were, as we shall see in the next chapter, avowedly economic.

The Earliest Times before the Norman Conquest can be Summarily Treated.—Without injustice, then, or impropriety, greater space in proportion may be given to English Economic History after 1760 than that reserved for preceding ages. And, if thus, dividing our treatment in two sections, of which, regarding the time occupied, one will be compressed in comparison with the other, we go back to the earlier in date, we find there again that a considerable part of the period

reviewed can be dismissed even more abruptly than the epoch as a whole. The Industrial Revolution was severed from the Norman Conquest by about seven hundred years. That was no short interval; and yet, as we shall note, in agriculture at least, which for many of those long centuries was the chief occupation of the people, the general system of land-tenure, and the customary methods of cultivation, prevailing through wide areas at the end, resembled in broad characteristics, at any rate, those practised at the beginning. Before the Norman Conquest, however, the Roman occupation of the country, with the subsequent incursions and fitful dominion of the Anglo-Saxons, had occupied about a thousand years. And yet the economic record of this stretch of time is necessarily brief. The Romans, indeed, brought to a remote part of their large empire a mature civilisation; and Britain was one of their granaries. Under the "peace" which they provided some economic activity no doubt existed, and the durable causeways, which they constructed, fixed the direction followed by the great roads of later times. But, despite such remaining evidence of their material resources, and their enlightened engineering skill, it has been generally agreed that, in contrast with what occurred in other countries, their institutions and their manners mostly disappeared. It is also recognised that the following age of Anglo-Saxon rule was marked by economic stagnation rather than advance. In any event, the business-traffic was inconsiderable in amount and primitive in kind; and the continual turmoil, which beset in turn different districts of the land, compared unfavourably, from this standpoint, with the previous Roman "peace." The Danes were,

it was true, adventurous voyagers who played a part in the later Anglo-Saxon period : but the Celts, who preceded, and survived, the Roman occupation, were, economically viewed, only a degree less rude than those people who in the dim obscurity of a primeval age may have made use of the stone implements now found deposited in lower geological layers of the earth. To such misty times it is that the hunting and the pastoral stages described in an earlier chapter belong ; and their economic history, such as it is, fragmentary and cursory, must, it is obvious, contain no small ingredient of the imaginative or the mythical.

The Manorial System of Agriculture—its Origin.—With the agricultural stage, however, we pass into a region, which can be more correctly viewed and described as historical, although the comparative study of backward tribes living in uncivilised districts at the present day furnishes foundation for the rational belief that the more primitive conditions commonly assigned to the two former stages may have previously existed, and then given way before that permanent settlement on a defined tract of land which the practice even of a crude agriculture seems necessarily to imply. Even here controversial criticism has thrown doubt upon the truthfulness of detail in the pictures drawn of village communities and the like. Even here, while we know with comparative exactitude the mode of land tenure and land cultivation prevailing at the time of the Norman Conquest, the precise interpretation of the terms employed in the accounts generally given of the Manorial System is by no means certain ; nor is the economic status of the various classes who composed that system yet placed beyond dispute. On

its origin, too, a vigorous debate has been conducted, and it is not yet concluded. While it is not questioned that the Norman conquerors used an institution which they found in being on their arrival, emphasising some characteristics, and accelerating and intensifying the movement of some forces, the discussion has in turn laid stress, first on Anglo-Saxon, secondly on Roman, and lastly on Celtic, influences as moulding the shape that was finally assumed. Thus the argument has been carried back until the disciplined imagination supersedes attested fact, and, as one inquirer has aptly put the case, the "result" being given, we have to supply the "cause" and "process." In the Manorial System, as we know it in Norman or before in later Anglo-Saxon times, there are features which indicate the original freedom of the tenants, while we cannot of course deny that they have become dependants on a lord. The problem of origin is whether, originally free, they were afterwards reduced to serfdom, or whether, originally serfs, they gradually acquired freedom. The Anglo-Saxon derivation accords with the former view, while the Roman harmonises with the second. But a third explanation is also put forward which maintains that the signs of freedom may reasonably be traced, not to those Anglo-Saxon manners which followed after, but to the Celtic custom which preceded, and left its marks upon, Roman institutions, or, at least, upon the country and its people while they were under Roman rule. It is certain that in the eastern districts, where the Danes were most prominent, the number of free tenants was most conspicuous, and that in the western parts, to which the Celts were driven by the conquering invaders, the

normal type of the Manorial System was not found, but in its place a looser kind of dispersed settlement was discovered. Such is the controversy in bare outline, and we have mentioned these conflicting versions of the origin of the System because they have filled a large space in economic histories, and also illustrate the uncertainty that attends the earlier chapters of the tale to be unfolded.

The Manorial System—its Characteristics.—(a) *The course of rotation.* After the Norman Conquest the Manorial System took definitely the form described in economic histories. For the main characteristics exhibited a varying origin, we have seen, has been sought. But, while some of these features disappeared long ago, others continued to exist, as we have remarked already, until the occurrence of those agrarian changes which accompanied the Industrial Revolution at the close of the eighteenth century and the beginning of the nineteenth. In the agricultural development of the country, accordingly, the arrangements of the Manor fill a conspicuous place. The arable land was generally divided into three great fields, cultivated on a fixed scheme of rotation. Sometimes the course was twofold, and such a system lent itself the more readily to that which followed. This was what was known as “convertible husbandry,” under which land, used mainly, as pasture, was from time to time broken up and brought beneath the plough. Such a plan was intermediate between the rotation of the Manor with wheat, beans, or oats, and fallow in succession, and the fourfold course of “Norfolk husbandry,” where the alternation of roots with cereal crops. avoiding the necessity of an inter

constituted an improvement in agricultural enterprise after 1760 no less important than the transformation wrought in this eventful period in manufacturing methods by the invention of the steam-engine. In these successive developments the distinctive stages of advance in agriculture can be summarised.

(b) *The open fields and scattered plots.* But there was another characteristic of the Manor which applied to the meadow land as well as to the arable. The three fields were "open" in the sense that the holdings of individuals were not fenced or inclosed, and, in order apparently to secure a rough and ready equality befitting a community of freemen, were dispersed in scattered plots. This was the case also with lots in some meadow lands : and the system survived throughout large portions of the country until the time when its continuance was found obviously incompatible with the improved cultivation of which "Norfolk husbandry" was an outstanding illustration. Even when "convertible husbandry" was practised, the advantages of "several" over "champion," of the possession of inclosed consolidated farms over the occupation of small scattered pieces in the open fields, were recognised, both for plough-land and for pasture. In the Manor the lord's demesne was sometimes thus compact, but it was often dispersed like the property of his dependants. Over the stubble of the arable, when the crops had been harvested, and through the meadows, when the hay was cut and gathered, the cattle of the villagers were turned out to graze, and on the waste and woodland similar rights of common were exercised.

(c) *The dependance on the lord.* But the dependance

of the subordinate cultivators on a superior lord, to whom in a measure they belonged and were bound to render service, was no less distinctive a characteristic of the Manor than the open fields and the scattered plots; and this "serfdom," which disappeared some centuries before the Industrial Revolution, has been held to point as directly to a servile origin as the possession of many diffused strips has been regarded as indicative of initial freedom. There were various classes of dependants. Some possessed greater liberty than others, such as the "socmen" or "free tenants." Even with regard to the great bulk, the "villeins," who had to perform not merely "boon-work" for the lord on special occasions, but regular "week-work," their exact status is not easy to fix with precision; and, while the law brought in with the Normans may have tended to depress them in the courts, by custom they acquired, even then, certain rights or made more secure those already got. A subordinate class of humbler tenants were the "cottars" or "borders," while actual "slaves" disappeared within a century of the Conquest and were never large in number. Officials representing both the tenants and the lord superintended the work of the Manor; and the King himself was a lord of several manors. A duty of military service under Feudalism rested upon certain classes of the dependants, who were also bound to bring their corn to be ground at the lord's mill, and to pay him dues, besides their labour, constant or remittent, on certain occasions. In the famous document, the Domesday Survey, made by the orders of the Conqueror, from which much of the evidence of the Manorial System is obtained, the position of the

lord, and the rights and obligations of the villeins and others, are connected with the payment of Dane-geld—a tax levied originally for the protection of the realm from the invasions of the Danes. Each village was for the most part self-sufficing, and there was little or no business intercourse between one and another. Agriculture was the sole occupation, although a simple craft like that of the blacksmith might exist.

The Manorial System—its Decline and Disappearance.—Certain leading characteristics of the Manorial System endured, we have seen, until comparatively recent times, although “inclosure” was strongly recommended by early agricultural reformers. It was arranged apparently among the smaller tenants before, handled by the lords, it assumed the size of an extensive movement, with the object of providing grazing grounds for the sheep that had become so profitable in connection with the lucrative woollen trade. Even then, under the Tudor monarchs, many districts were unaffected; and the movement relaxed, or became less injurious, when arable rather than pasture was the destiny of the land inclosed. It was once more a general movement in the eighteenth century, and, as the result, the open fields disappeared. The growth of the woollen industry however, previously, was, in a large measure, responsible for the complete decline of the other chief characteristic of the Manorial System—the labour-services of the villeins. A substitution of money-payments, carrying with it greater freedom, could be discerned in different directions and in increasing measure as time elapsed. A practice of renting portions of the demesne, and of engaging paid labour, accompanied this process.

The Black Death and its Results.—The famous pestilence of the Black Death, which, visiting the country in the middle of the fourteenth century, caused an immense mortality, and a scarcity of workers, accelerated perhaps rather than set in motion forces which in the end assisted to destroy villeinage. On the one hand, it checked commutation of labour-service into money-payment, for the lords were anxious to enforce their claim for compulsory work. The Statutes of Labourers, which, in 1351, 1357, and 1360, tried ineffectually, by forbidding a change of wages, to keep down the market value of a scarce commodity, and prohibited migration from an old abode or employment, coupled with these penal regulations an attempt, in accord with the mediæval spirit, to fix the price of provisions. They were followed by the Peasant Revolt. The motives for this violent but brief émeute were mixed and not very clear ; and its results, though temporarily disappointing, may have been more permanently influential. Yet the destruction of the evidence of their serfdom by the angry villein-peasants did not lead to its immediate abolition. On the other hand, the lords, in their pressing difficulties of obtaining labour, were more disposed than they had been to let their land. The “stock and land lease,” by which, as under the metayer tenancy of the present day in districts of the Continent of Europe, a partnership was established between the landlord furnishing certain capital and the tenant working the land with the labour of himself and his family or others, preceded that modern form of agreement, common in England now, by which the landlord equips the farm and the farmer supplies what is needed for its cultivation.

Yet a still more potent influence for change appeared in the increased demand for wool. The woollen trade, as we shall notice, was the chief business concern of the country until it was displaced by cotton in the eighteenth century; and the change from the raising of the raw material, wool, for export to the production of the manufactured article, cloth, was significant in many varied aspects. The growth of the woollen industry made the raising of sheep more lucrative; and grazing grounds required, in comparison with arable cultivation, little labour. Under this irresistible joint impulse, accordingly, inclosure was stimulated; and sheep, in Sir Thomas More's descriptive language, took the place of men "devouring" the inhabitants of what were once populous townships or villages. But the evil had its compensation in the decline of villeinage, for the need of compulsory labour-service obviously became less urgent.

Changes in the Towns.—When we pass from early life in the country to that in the towns we find that, as each village was for a long while self-sufficing, so, except in certain cases where curious relations of amity arose between certain towns, a visitor hailing from one and coming to another was as much an "alien" as a foreigner from beyond the seas. An exclusive spirit on the part of the inhabitants regarded him with jealousy, limiting narrowly his opportunities for trading intercourse. And we discover also in the Gilds which obtained control of the business, and of the affairs generally of the towns, dominant institutions not dissimilar in character from the Manor. In fact, the lords, including the king, had possessed and exercised manorial rights over the towns and their

markets ; and it was a cherished aim of the citizens to secure by some bargain made for the payment of a lump sum the right to tax themselves, and extinguish this manorial control and its burdensome attendant dues. The origin of the towns is obscure. It has been connected with a variety of reasons ; but, as trading centres, there can be little or no doubt that at the first the business transacted in their markets was such as would meet the needs of the surrounding agriculturists. In time, however, other crafts and trades arose.

The Gilds.—The Gilds were, we have remarked, conspicuous in the towns. They were bodies which combined charity and fellowship among their members with class-selfishness. The older Merchant Gilds, although they were not wholly identical with the burgesses, yet contrived to secure the government of each town and a monopoly of its trade. They acted as friendly societies caring for the sick and poor, and for the families of the dead. They went shares in profitable transactions. They framed and enforced rules for the good conduct of the trade. As different crafts arose, their place was taken by the Craft-Gilds ; for a single merchant gild could no longer exert an effective rule over all these diversified employments. It was, in fact, the obvious advantage attendant on the practice of the division of labour and not, save in particular instances, any bitter or prolonged hostility between merchant and craftsman which, in England at least, caused the substitution of the craft for the merchant gilds. The craftsman was indeed often, or generally, a merchant, and craftsmen were members in some instances of the older merchant gilds. The

later craft guilds similarly added to a jealousy of those outside a generosity to those inside the combination. They prohibited dishonesty in production or in sale, and they regulated the hours and the conditions of labour. But that principle of the division of labour, which had brought them into being, did not cease to operate. For, while the early craftsman was at once employer, foreman, and workman, and also a merchant buying the raw material requisite and selling the finished goods, these functions were in time separated altogether or reunited in some instances in a different kind of combination. The most marked division was that between the trader or dealer and the worker or producer, and the dominance of the former class over the latter became pronounced in various ways and different degrees. The intricacies of foreign trade especially lent a superiority to the merchants who were familiar with them; and among the "companies" which succeeded to the craft guilds, organisations like the "drapers" or the "mercers" were famous as the larger "livery companies." The term "livery" itself denoted a stage in the growing exclusiveness of the guilds and in the increasing separation of classes. The government of the guilds passed to a small section of the body, and this change exemplified a spirit which made the wearing of an expensive dress at ceremonies or the production of a costly masterpiece an indispensable condition of full membership. At one time the road was easy to travel, which led from "apprenticeship" to "mastership"; but fees were subsequently raised for admission to the former stage; and the journeymen or hired labourers became a separate class rarely or never rising

to be masters. Yet the Journeymen Fraternities, which were a third form of combination, seemed to have been used by the small industrial masters in their struggle with the large trading capitalists, and to have been placed in some subordinate connection with the craft guilds that had fallen under the control of the latter class.

The Woollen Industry.—The household or family, the gild, the domestic and the factory system, have been described as stages through which industrial activity has successively passed, just as agriculture has developed, as we saw, from the “open fields” of the Manorial System with its three-course rotation through “convertible husbandry,” where, inclosure having taken place, pasture alternated with arable, to the “Norfolk husbandry” of a four-course rotation, with roots and artificial grasses interposed between cereal crops on fenced and consolidated holdings. The woollen industry, however, exhibited some traces of arrangements like those of the domestic system, even before it passed into the earlier gild stage; and it certainly was the first to break away from the restrictions of the guilds and to follow in the country districts beyond the reach of their control the freer, newer pattern of the regular domestic system. It did not afterwards, however, conform with such ease and rapidity to the succeeding final factory system as the cotton manufacture which had no conservation tradition to observe. It was naturally one of the earliest of industries; and its change of structure and organisation can be justly viewed as broadly typical of the general development of English industry. The most notable incident, perhaps, in its long history was the

substitution of cloth-manufacturing for wool-producing; and we can trace the reflection of such shifting of importance in the varying policy adopted towards Flanders, at one epoch the chief customer for English wool and at a later period the main rival in cloth manufacture. We can discern the same cause at work in alterations of the taxes; and wool was from the first an important source of revenue. It was used, too, as a means of transmitting the papal dues to Rome, while those alien immigrants who taught Englishmen so many of their trades at different times found representative examples in Flemish weavers who under Edward III. introduced the "old drapery," and under Elizabeth brought in the "new." The "aulnager" who fixed the length of woollen goods was no less typical of mediæval regulation than was the selection in the "staple" of the market where the wool must be sold and bought. But here again we may note that, while the privileged Merchants of the Staple were concerned with wool, their successors, the Merchant Adventurers, the earliest of those trading companies who exercised a monopoly of foreign trade, were by contrast busied with dealings in cloth. The guilds of weavers were conspicuous in certain places where they came in conflict with the merchant guilds, or the town authorities; and this collision has been explained as an exceptional circumstance due to their foreign origin.

The Domestic System.—But the woollen industry was, as we have said, the first to pass away from the gild to the domestic system. That system was one in which a capitalist or moneyed man exercised the direction and control. There were some signs of

capitalistic power in this industry before it entered the gild stage, and in the gilds themselves large trading capitalism, as we noticed, acquired a dominance over the smaller industrial element. With the domestic system the influence of superintending financiers was more conspicuous and enduring and pervasive. It was indeed significant. The "clothier," as he was called, gave the material to and received it again from each class of the handicraftsmen engaged on each stage of the manufacture in turn, working with the help of a few apprentices and journeymen in their homes ; and he sold the finished goods in the market. In certain districts the woollen industry was thus organised long before the commercial capitalism of dealers or "undertakers" gave way at the time of the Industrial Revolution to the industrial capitalism of employers in the factories.

A few instances of early establishments of the size and nature of a factory existed ; but the appearance of moneyed men wielding the power which capital brings was far more general. The development of the "domestic" system, affording the appropriate sphere for this financing skill and organising influence, was, we may add, coincident with the first marked period of inclosure in agriculture. The large graziers were often identical with the directing clothiers ; and the "men" whose places were taken by the "sheep" found some opportunity for employment in the new type of woollen industry.

The Tudors and the reign of Elizabeth.—The reign of Elizabeth was a very notable period of English economic history. The policy of the Tudors generally was distinguished by the strong authority of a central

government, and this feature was especially prominent under Elizabeth. While on a national scale monarch and statesman might enact what local bodies had before enforced in their limited spheres, their narrow exclusiveness was broken down by such effective means. The Manor and the Gilds, in that sense at least, disappeared as controlling institutions in the country and the towns respectively. There were reasons, as we shall see, why the Sovereign and the Legislature tried to stay the process of inclosure ; and some steps were also taken to restrain the departure of the woollen industry worked by the domestic system from the regulating rules of the gilds. But the power of capital became pronounced. The cloth manufacture of England had established its supremacy over Flanders by the "Great Intercourse," as it was called, at the close of the fifteenth century ; and, after the decline of Venice and the discovery of the New World, the sea-power, the commercial enterprise, and the colonial empire alike of England began with Elizabeth and her sea-rovers in the second half of the sixteenth.

Elizabethan Legislation.—At home the Elizabethan legislators dealt in comprehensive and successful fashion with three urgent problems. They reformed the currency which had been debased by Henry VIII. and Edward VI., who enjoy an undisputed and unenviable notoriety among English sovereigns for occasioning this grave mischief to the public interest. They also established systematised provision for the relief of the poor. In their sage regulation of this matter they availed themselves of experiments made previously by the national legislature in raising the necessary funds, and by the municipalities in coping with vagrancy and

in assisting the deserving poor. Now, as before and afterwards, a great change in the economic order of affairs had brought distress to large classes of the people. The inclosures marked the decisive break between the old and the new arrangements ; while the dissolution of the monasteries, withdrawing the charity given before perhaps erratically and harmfully, was probably less responsible for the wide suffering that demanded urgently the provision of some remedy. The Elizabethan Poor Law, however, setting " prevention " before " cure," placed in the forefront of its policy the apprenticeship of the children, put next the employment of the able-bodied, and only after these the care of the impotent, and thrust to the very background the penal repression of the undeserving tramps who had previously attracted the chief attention of the legislature and the administration. Finally, the Statute of Apprentices or Artificers gave national scope and forcible effect to the recognised rules of the guilds on such matters. It insisted on a regular training for work, and in its wages clauses it combined the approved plan of fixing by authority the rate of earnings with greater elasticity in the adjustment of the amount to the varying prices of provisions.

The Mercantile System: its Chief Aims.—The exemption of agriculture from the limitations of apprenticeship was probably intended to encourage that particular calling. The attempt to check inclosure was similarly designed to stimulate one kind of agricultural work. The favour thus shown to tillage, as contrasted with pasture, was one of three main lines of conduct pursued under that Mercantile System which reached its zenith with Elizabeth. It had commenced

with Richard II., and continued to prompt and direct the acts of English statesmen in economic matters through such violent political convulsion as that caused in turn by the Commonwealth, the Restoration and the Revolution, until its influence was finally overthrown in the nineteenth century. Under a powerful sovereign or a small body like a Privy Council, helping the monarch in carrying out a policy, it could be consistently pursued ; with the fluctuating counsels of a large Parliament, and the varying demands of a vast trade, it failed, and its restrictions became cumbrous and complicated, harassing rather than assisting business. But, while the term "system" is perhaps somewhat misleading, the broad policy itself was clear. The Mercantilists wished to advance the "power" of the country rather than promote the interest of the consumer in that "plenty" which was the passing aim of Edward I. and Edward III. They further held that the power of the country might be secured and strengthened by three plans of action. The accumulation of treasure, promoted first by forcible detention of bullion, and obtained later by the indirect means of causing a greater influx than efflux of the precious metals through a favourable "balance of trade," as the result of an excess of exports, fostered by bounties or by drawbacks, over imports, prohibited or deterred by duties, supplied the sinews of successful war. The creation of a navy, the first line of defence for a people dwelling on an island, was assisted by Navigation Laws, limiting the carriage of goods to England and her colonies to English ships owned and manned by Englishmen, and by the continuance in Protestant times of the Roman Catholic order of a fish diet on fast days ; for

the former was of help to a mercantile marine, and the latter aided the fishing industry, and both formed recruiting areas for the Navy. Lastly, agriculture, and especially tillage, with its greater demand for labour, encouraged the growth of a numerous healthy population which could supply defensive forces for the maintenance of the power of the realm. Accordingly inclosure was forbidden, and the export of corn was stimulated.

The Mercantile System: its other Objects.—The introduction of skilled foreigners to teach their new trades, and the furthering of the importation and prevention of the exportation of raw material needed for manufacturing industry, were other particular modes of pursuing the same general policy. Colonisation and Commercial Treaties were also employed for this end; and it should be noticed that, as the interests of individual consumers, so the advantage of classes in a nation, or of portions of an Empire, were regarded as subordinate to the supreme purpose of advancing the “power” of the realm. It was in this spirit that the Colonies or Plantations were treated, and compelled to sell to the mother-country, and to no one else, the goods which she required, while they were not to compete with her in the production of her manufactures. It is doubtful whether in fact the American colonies suffered material injury from the “enumeration” of commodities on these principles in the Navigation Acts, while they benefited from the preference given to them over foreign nations in England’s markets. But Ireland handled in this way seems to have been wronged. That trade, and often, if not generally, exclusive trade, was the motive of colonial enterprise can no more be disputed than that the aims and consequences of the

warfare, first with Spain and Portugal, then with the Dutch, the great carrying people, and lastly with France, in which England was engaged throughout the seventeenth and eighteenth centuries, were largely economic. Traffic with the New World across the Atlantic Ocean, and business in India, inspired a policy which furnishes a connecting link between the overthrow of the Spanish Armada and the battle of Waterloo. At the close of the period the mastery of the sea, the supremacy in commerce, and a colonial empire were secured.

The Mercantile System : its Spirit.—The Mercantile System favoured monopoly in some respects both at home and abroad. Foreign trade was in the hands of exclusive trading companies, of which the East India Company was typical and won great fame. Primarily commercial, it became against its will political. The “regulated” type of company, however, was less closely compact than the “joint-stock,” and Parliament sometimes compelled the substitution of the looser form of combination for the more complete, and sometimes encouraged the competition of rival “interlopers” as they were called. Within the country, too, the Mercantile System was so far liberal that it substituted the larger union of the nation for the smaller close monopoly of gild or town. Yet it must be admitted that, whatever were the case with trade, both in agricultural and in manufacturing industry progress was comparatively slow until the revolutionary changes wrought at the close of the eighteenth and the beginning of the nineteenth century. Inventions and improvements were few and unimportant. The foundation of the Bank of England at the end of the seventeenth

century was, however, a stroke of genius. It solved the difficulty raised by the unpopularity of taxation for an unstable dynasty through recourse to a loan which was the origin of the National Debt, and it extended by a notable example the range of the powerful instrument of credit. Banking, as it is known now, had been practised by the Goldsmiths, who were the jealous rivals and bitter enemies of the Bank of England ; but the development set on foot at this period may justly be regarded as responsible in a large degree for the subsequent growth of manufacturing industry. Had not the necessary capital been made easily available at that later time through the spread of banking, the mechanical inventions which ushered in the Industrial Revolution would, so far as we can see, have remained unutilised.

SUMMARY

1. While Economic History is very important when the industrial stage is reached, earlier periods can fittingly be treated with comparative brevity.
2. In agriculture the Manorial System has filled a prominent place. Its origin is obscure. Its characteristics can be described in connection with (a) the order of rotation of crops, (b) the open fields with scattered plots, (c) the dependence on a lord. Its decline was not due to, but was affected by, the Black Death and its results.
3. In the towns the Gilds were similarly conspicuous. Merchant Gilds, Craft Gilds, and Journeymen Fraternities existed at different times.
4. The woollen trade may be treated as typical in many respects of industrial development ; but, escaping the restrictions of the Gilds, it passed into the Domestic System, which was organised by moneyed capitalists.

5. The reign of Elizabeth was remarkable for notable economic legislation.
6. It was also the period when the Mercantile System reached its fullest development. The aims, and objects, the method and the spirit of that system, which directed economic policy for many centuries, must be judged according to the circumstances of the times. The accumulation of treasure, the maintenance of a navy, and the encouragement of agriculture, especially in the form of tillage, were most prominent. Colonisation and war were also prompted by the motive of acquiring trade; but the development of industry was nevertheless comparatively slow until the middle of the eighteenth century.

QUESTIONS

1. Describe a Norman Manor, pointing out its good and its bad features and contrasting its conditions with those of agriculture at the present day.
2. Estimate the importance of the Black Death as an event in English economic history.
3. Compare a mediæval Craft Gild with a modern Trade Union.
4. Why was the woollen industry of such importance? Sketch its development from earlier to later times.
5. In what ways did Elizabeth and her statesmen deal with the problems of their day?
6. Can you account for the long duration of Mercantilist policy? What were the chief methods employed for carrying its aims into effect?

LITERATURE

See the close of the following chapter.

CHAPTER V

A SKETCH OF ENGLISH ECONOMIC HISTORY

B. AFTER THE INDUSTRIAL REVOLUTION

The Importance of the Period from 1760 to 1850.—The Industrial Stage has already been summarily described in Chapter III., where its characteristics were mentioned and explained. We have now, continuing and completing the brief sketch of English Economic History begun in the preceding chapter, to supply a more detailed narrative of momentous changes which occurred at the close of the eighteenth and the beginning of the nineteenth century, when the Industrial Stage superseded those which went before. If the previous period, extending from the reign of Elizabeth onwards, had not, as we have seen, witnessed any marked development in the methods, either of agricultural or of manufacturing industry, as commonly pursued, what may be called a "revolution" in both these spheres of activity was now about to happen. The term may mislead if we suppose that no preparation whatever had been made beforehand for the great alterations that were then effected; but it is certainly appropriate to their magnitude, and within no long interval of time economic conditions were in not a few

respects transformed. Capitalism, we have noticed, was not unknown in earlier days ; but the severance of employers from employed in status, aims, and interests became decidedly pronounced after the Industrial Revolution. A commercial expansion had also been achieved before the large manufacturing development occurred, and a wide trade, in fact, supplied powerful stimulus to an improved industrial organisation. The foundation of the Bank of England too, was, as we have remarked, a notable incident in the history of credit, and this happened at the close of the seventeenth century. But that necessary aid to modern business was, like the means of transport both of goods and men, altered and developed beyond recognition in the period we are now reviewing. The population of the country, finally, advanced rapidly at an unprecedented rate, and it changed its chief seats of settlement. England thus became in a real sense and a remarkable degree the "workshop of the World."

Agricultural Changes.—The various forces in operation combined to work together. This was notably the case with alterations wrought simultaneously in the fashion of agriculture and the mode of manufacturing industry. In the former occupation, as we have noticed, "open fields" tilled by primitive methods might be found in many places so late as the eighteenth century, recalling features of the system prevalent seven centuries before at the Norman Conquest. But the march of improvement in knowledge and in practice swept away the "Goths and Vandals" of the "open-field farmers," as they were described by a vigorous agricultural reformer, Arthur Young. Effective drainage, it was obvious, was impossible under a system where

holdings were made up of scattered plots intermingled with those belonging to other tenants. Common rights of grazing on the stubble were no less formidable hindrances to scientific farming. The old system must accordingly give place to the new ; and "inclosure," however hardly it might press on the smaller folk of the rural community, was imperatively demanded, if sufficient food was henceforth to be raised for the increased population busy about machinery during long hours of work in urban factories. "Norfolk husbandry" with its four-course rotation, alternating green crops advantageously with cereals, skilful and successful schemes of breeding, where the meat-developing rather than the wool-producing qualities of the sheep received attention, better draining and more efficient dressing with manures and other suitable applications of the soil were notable discoveries which, under the informed impulse in turn of Townshend, Bakewell, and of Coke, marked an epoch of English agricultural history. They were, in fact, no less "revolutionary" in their nature and their consequences than the alterations wrought in manufacturing industry ; and the second helped as they were helped by the first. For these agricultural improvements were suited to large rather than small farming, and they required inclosure. It was arable cultivation, raising corn, which now, unlike the previous movement in Tudor times, supplied the motive for inclosure, although some of the land fenced might be used, now as then, for pasture, and need in consequence less and not more labour. It was to the growth of wheat, with farming on an extensive scale, that the fresh scientific agriculture was specially adapted, and, in fact, mainly applied. No fair observer

could dispute the balance of economic advantage resulting from the change in the shape of increased production for a larger mass of people : its social consequences to certain groups among them were more open to suspicion and more deserving of disapprobation.

Common Rights and the Yeomen.—The injury done to the villager, who through inclosure lost an opportunity of turning cattle out to graze, was not seriously diminished by the simultaneous fact that he could pursue no longer the simple spinning or the weaving in his house under the domestic system, in competition with the novel plan, now generally adopted, of factory employment. Driven away from the countryside, and drawn irrevocably to the large establishments in the noisy populous towns, he might well feel the exchange to be a hard necessity rather than a welcome movement in advance. He may possibly have been a mere “squatter” with no legal right, if inclosure took the form of extinction of the waste, and its more profitable and productive use for arable or even pasture. If, on the other hand, it meant consolidation of petty scattered holdings dispersed through open fields, he might nevertheless be unable to confront the heavy cost of fencing the land allotted to him in lieu. When all that was done was strictly legal, or was not purposely unjust, he might be unintentionally damnified ; while the illicit encroachment which was probably not confined to large landlords, but was also practised by their smaller rivals, might lie beyond his reach, and, uncontrolled, might cause him injury. Another important body of agriculturists was affected by the movements of the times, and indeed tended rapidly to disappear. That was the class of “yeomen.” They had possessed their

farms, and had worked them largely with the labour of their own hands or of those of their family. Inability to meet the strenuous burden of heavy mortgages, occasioned partly through high prices of farm produce in the Napoleonic war, and the temptation to sell offered by rich business men, who coveted the social status and political rights of landlordship, may have been co-operating influences ; but the superior advantages of extensive holdings for the growth of corn by the new scientific modes of cultivation certainly appear to have prompted them to change their lot for that of large farmers. The economic trend, in fact, favoured large farming at the time, and placed a discount in comparison on the methods of small cultivation. This was the reverse side of the shield the front of which was agricultural improvement.

Industrial Changes: the Factory System.—The domestic system of industry, as we have remarked, declined and, practically speaking, vanished. The change, however, we must again remember, did not mean the introduction of capitalism ; for before the factories rose the marketing of goods, even when produced by the craftsman working in his house with his journeymen and his apprentices, was generally in the hands of dealers or “undertakers,” who sometimes supplied also the materials used, and the simple tools or implements employed. Sometimes, too, the whole process of production, from the acquisition of the raw material to the sale of the finished goods, was, as we have seen, organised and financed by moneyed men. But the advent of the factory, ousting what we may distinguish as “commercial capitalism,” installed “industrial capitalism” in its stead. Industry came to be

conducted in large buildings fitted with elaborate costly machinery, and containing a crowd of workers of different age and sex. The word "manufacturer," it has been aptly said, "forgot its etymology"; and it was the employer, or entrepreneur, as the French have called him, not the handicraftsman, who was henceforth thus described. The concentration, which became the rule, of work in factories was due, however, it would seem, not so much to mechanical inventions, although they certainly demanded an appropriate sphere of operation, as to the discovery and use of a fresh motive-power.

The Mechanical Inventions.—The rapid invention of new machines and the swift contrivance of novel processes in a host of trades and occupations at the time of the Industrial Revolution are, and must remain, an inexplicable marvel. That so much ingenuity should be forthcoming and should be exhibited in so short a time needs some explanation; but we must perforce be content to note that a wonderful series of such incidents occurred in England at the close of the eighteenth and the beginning of the nineteenth century. We can see, indeed, how in the cotton industry the "flying shuttle," invented earlier, accelerating the work of the weaver, stimulated the search for improvement, and quickened the desire for corresponding speed, in the spinning branch of the trade. We may note without surprise that the principle of the "spinning-jenny" and the "water-frame" should be dexterously combined in the "mule" fittingly so termed; and these inventions, giving the advantage of rapid output to the spinner, were not unnaturally followed, on behalf of the weaver, by the power-loom. From the fresh cotton industry,

ready to welcome change, and immune from the restraint of fixed tradition, the machinery was introduced into the older woollen trade and others. But these are but a tithe of the many great improvements wrought in a whole crowd of occupations. Among the most important in its consequences, perhaps, was the smelting of iron by coal instead of charcoal. That led to the migration of the iron manufacture from the forests of Sussex to the mineral deposits of the Midlands and the North placed conveniently together.

The Motive-power employed and its Results.—The mechanical inventions were at first, however, worked by hand ; and no great change of organisation followed as a consequence. With the substitution of water factories were built by the sides of streams. With the use of steam in place of water such buildings rose in the heart of populous towns. At first, as an experienced writer has stated, a good supply of the raw material and easy access to the markets were the chief considerations. Hence the prosperity of East Anglia as a centre of the woollen industry, with Flanders as its mart across the sea, and the fame of West of England cloth, with the well-known breeds of sheep in the neighbourhood of both localities. When water-power was next employed the raw material was more conveniently brought to the motive-power than the latter to the former, and Lancashire and Yorkshire, with their rivers flowing in great strength as their outlets in the sea were not far distant from their source, were favoured seats of manufacture in this stage. Nor were they less adapted for the next stage in the evolution when steam was introduced. That could be generated anywhere, though the proximity of coal to move, and of iron to

make, the machinery, was desirable. But, in a greater degree than water-power, it lent advantage to concentration in factories. And now it was not the raw material which was so important, nor was it the motive-power; but it was the command on easy terms of a plentiful supply of labour which became the determining consideration. Lancashire and the West Riding of Yorkshire continued to offer advantages at this stage, and they became the chief manufacturing centres. It was no less certain that the villages of the countryside could not compete under these new conditions, although the interesting possibility of a return to cottage industry in rural sites may shortly be reopened by the use of electricity as motive-power. That, generated in one centre, can be transmitted through an extensive area of space. But nevertheless the organisation possible in large establishments like factories must continue to be an important matter for the business "undertaker," and the high rents and rates of urban centres may also be outweighed by the various profitable connections that arise and endure in populous localities with by-industries and marts.

Other Changes and Improvements, *e.g.* in Transport.
 —Other changes hardly less important were necessary to give full effect to the "revolution" wrought in agricultural and manufacturing industry. They were those connected with the modes of transport and with the means and methods of communication. The names of Telford and Macadam are linked closely with road-making on scientific lines, and those of the Duke of Bridgewater and his engineer-adviser, Brindley, were not less famous for the construction of new canals and the improvement of existing waterways. By such oppor-

tune aid the goods pouring forth from the busy factories could reach their markets easily and cheaply ; and not only for commerce abroad, across the surrounding seas with their convenient harbours, but also for communication in the interior by water or by land, the geographical character of England has been suitable. The motive-power of steam was applied to locomotion ; and the railway and the steamer became the carriers of men and goods. The postal and telegraphic services in their turn facilitated business intercourse, but the day was still distant when the sailing vessel would lose its position of primacy on such lists as those issued by Lloyds, and men could, through the telephone, talk with one another between London and Paris.

Banking and Credit.—As we have before remarked, the organisation of credit by bankers and brokers was a potent force ; for it furnished, where it was needed, in suitable amounts, and on reasonable terms, the capital required for setting the new machinery to work on the output of goods to be sold in world-wide markets. Napoleon bent his dexterous strong efforts to the overthrow of England's credit-system, believing with some justice that success was probable, and that, if it were once achieved, his stubborn foe would be brought inevitably to her knees. But he failed no less conspicuously than in his attempt to exclude by arbitrary decree from Continental emporia the English articles, which customers, including his own subjects, imperatively demanded. The development of banking on lines, which to those unfamiliar might seem rashly adventurous, but to those informed are safe and advantageous, has proved of incalculable benefit to English industry and trade. From the many sources of

quiet accumulation the stream of capital is thereby conducted almost insensibly to the various points where it can be opportunely used to maintain and expand bold, successful, lucrative enterprise. "A great many of the strongest heads in England," wrote Bagehot, who, in his fascinating book on *Lombard Street*, showed clearly at once the marvellous power and the wonderful delicacy of the banking system which finds its headquarters in that street of London, "spend their minds on little else than on thinking whether other people will," or will not, "pay their debts." No enterprise in England which can offer a reasonable promise of success will "perish for want of money."

The Problem of Pauperism.—The changes thus rapidly reviewed brought evils no less than benefits in their train; and problems arose which compelled attention. Among the most serious and conspicuous were those concerned with the position and the prospects of Labour. A swift growth of population was no less noticeable than its movement from old to new abodes. To increase the numbers of the people was held to be a patriotic duty, when soldiers and sailors were required urgently to fight against Napoleon; and labour was no less pressingly demanded in the factories turning out the goods, the profits from the sales of which furnished the wealth required to finance the War. The economist Malthus, on the other hand, saw in the "fecundity" of man, coupled with the "niggardliness" of Nature in supplying food, a menace which was fatal to the pleasing visions of fanciful utopias, and a constant bar to the continuing prosperity of ordinary life. A lax administration of poor relief offered a powerful stimulus to population; and in the last quarter of the eighteenth

century two steps were taken with the best intentions, but the worst results, in relaxing the stringency with which the Poor Law had been generally administered since the Elizabethan Act of 1601. By Gilbert's Act, which contained some excellent provisions, and was "optional" in its observance, the "workhouse-test," by which applicants for relief were offered, as a proof of their destitution, compulsory removal to the workhouse, was abandoned, and "outdoor relief" was readily bestowed. By the action of the Berkshire magistrates meeting at Speenhamland the vicious system of granting "allowances" from the rates as supplements to wages, regulated by the price of provisions, and the size of the family of the applicant, was introduced. Both departures were given general recognition; and an alarming growth of pauperism, with an immense expenditure in consequence, ensued. The deprivation of rights of common in the agricultural districts, and the new conditions of life among the workers in the factories in crowded towns, intensified the evil; and it demanded the drastic treatment which it received in 1834 in the Amendment Act of that year. The intention of the measure was that the lot of the pauper should be less and not more desirable than that of the independent labourer, and that a central authority should restrain mischievous lapses from prudent administration on the part of the local boards of guardians. Pauperism, in the sequel, notably diminished.

Self-help and State Interference.—Self-help, as contrasted with assistance from the State, was what the authors of this new Poor Law recommended. Malthus, when he turned from controversial narrow vehemence to the broader sphere of historical exploration and statisti-

cal summary, discovered that, as civilisation advanced, the "preventive" check of prudential restraint on the growth in the numbers of the people superseded and became more effectual than the barbarous "positive" checks of vice and misery which in its absence must finally operate. The comfort of the race had, in fact, if long views were taken, increased and not diminished; and men had advanced, generally speaking, and not retrograded. They had, in fact, obeyed the enlightened promptings of individual interest when they had been educated to this point; and the appeal to such a motive found certainly much favour with Malthus and his fellow-economists. The Factory Laws aroused their opposition, because they seemed to come into direct, open conflict with this attitude; and the combination of the workmen in Trade Unions was also disapproved. For, though voluntary and not imposed by the authority of a Government, it yet required individuals to subordinate their action and their interest to the welfare of the body or the class to which they belonged. The thoughts and acts of the economists in this matter were commonly embodied in the maxim "laissez-faire"; and they rested in effect on the belief expressed by Adam Smith that the individual, pursuing his or her own interest, would be led by an invisible hand to promote the interests of the common weal. Whether this particular conclusion is consciously held, or indefinitely entertained, the assumption of individuals competing freely with one another lies underneath a great part of the ordinary reasoning in text-books of Economics: and the idea that individual liberty is "natural" and the action of the State by contrast "artificial," can sometimes be discerned, as

we shall have occasion to note later, in economic argument. It was at any rate stoutly held and dogmatically affirmed by those economists who demurred to Factory Legislation.

The Factory Laws: (1) their Reason.—Yet it was possible that individuals might not recognise, or recognising, might not have the power to pursue their interests. A want of harmony was admissible between the present and the future interest of the individual; and a wider gulf might separate the immediate interest of the individual from the ultimate interest of the whole community. In such a case, which, in fact, was presented by the new conditions of work for certain classes in the factories, the philosophy of “letting alone” could easily be shown to be inadequate. For neither the employers, eager to secure a large return for their outlay of capital and their exhibition of business capacity, nor the parents of the children forced to work for long hours in unhealthy conditions, who were anxious to add to their own income the wages earned thereby, nor even the nation absorbed in the desperate struggle with Napoleon, for which the wealth created by busy manufactures supplied the necessary funds, deliberately sacrificed the health of the coming generation to the needs of the moment. They did not consciously, we must hope, appreciate the clash of interests, while the children, the “young persons” and the women, successively protected by the Factory Laws, were powerless to defend themselves. The legislation, however, which was introduced for this purpose, and extended in the elaborateness of its provisions, and in the range of their application, as occasion suggested or required, was “experimental,” like so much other

statesmanship in England. A remedy was sought to meet an urgent situation: it was straightway used, and then it was adapted afterwards to contemporary circumstance. If mistakes were made, no false pride prevented their correction; if the evils were not stopped, more drastic measures were invoked.

The Factory Laws: (2) their Development.—The hard case of the pauper children apprenticed to work in the cotton-factories, and transported in batches from other parts to Lancashire, first attracted notice. But the regulation by the State of the distressing conditions of their employment was prompted not so much because it was the fulfilment of an obvious duty, as on account of the serious danger to the health of the neighbourhood caused by the life they were forced to lead. The process, however, once begun, continued until a whole code of laws was placed upon the Statute Book. From children to “young persons” and from “young persons” to women, the shielding hands of the State were successively extended. To cotton and to other textile factories, and then to factories generally, until domestic workshops finally were reached, the powers of inspection and of regulation were applied, and dangerous employments of different kinds were brought within their scope. The restriction of the hours of labour, which by degrees became more stringent, was supplemented by the fencing of dangerous machinery, the provision of a certain quantity of window-space, and the enforcement of sanitary provisions. The establishment of inspectors was found essential to the validity of the laws; and their authority was continually augmented. The presence of children in school was devised as a guarantee that

they were not engaged on work, and evasion of the rules by systems of "relays" was met by the express stipulation of fixed hours for the opening and the closing of the factories. Such was the lengthening story, the first chapter of which dates from 1802.

Trade Unions : (1) their Origin.—The Factory Legislation, thus outlined, being concerned alone with the protection from injury to health of those who were presumably unable to defend themselves, was limited to children, "young persons" and women. It was true that, when certain regulations had been made, they necessarily affected all the workers in one building : and the men in their advocacy of the Nine Hours Bill were aptly described as fighting for themselves "behind the petticoats of the women." But the weapon of defence, to which they themselves specially resorted in efforts to cope with the new conditions created by the Industrial Revolution, was the strength derived from union. They formed combinations in many trades. Those combinations indeed appealed in the first instance to existing, if disused, provisions of the law. To stem the flood of apprentices, which was being poured in by employers eager to increase the output of their factories at small expense in wages, they invoked the Elizabethan statute of apprentices ; and they also tried to revive the practice, which fell within the scope of that enactment, by which the justices fixed the rates of wages. At first they were successful, but in the end Parliament, impressed by the emphasis laid by the masters on the urgent need, in the vital interests of the country, of removing all impediment to rapid and abundant manufacture, repealed the statute and ended the practice. At first, too, combinations, whether of masters or of

men, were not regarded with authoritative disfavour ; but at the close of the eighteenth century the Combination Acts were passed. Trade Unions, it may be added, had been formed, not when and where the factory-system was introduced, but in those trades and at that time in which the workman lost possession and control of the necessary means of production. Yet it was in the newer employments, such as the cotton trade, which readily conformed to the fresh system of industrial as contrasted with commercial capitalism, that the most angry spirit was aroused, and the most embittered stubborn contests were conducted between masters and men.

Trade Unions: (2) their History.—After the Combination Acts, although in some instances perhaps Unions were known openly to exist, and were tolerated or approved, in others they were formed in secrecy, dissolved and formed again. Through the skilful efforts of Francis Place, a master-tailor at Charing Cross and a born wire-puller, who subsequently was also largely responsible for the successful agitation for the famous Reform Bill of 1832, the Combination Laws were repealed in 1824, and, after re-enactment, caused by alarm at the strikes which followed the repeal, that was confirmed in the following year. Place prophesied that, once the legal disability was removed, Trade Unionism itself would disappear. But his anticipations were not fulfilled, and the prohibition by the common law of action “in restraint of trade” continued to obstruct the action of the Unions, and to cause repeated friction. It was not until half a century had elapsed that they gained legal status and were freed from continual peril of penal repression. It was not until they passed under

the control of a small body of prudent officials who, limiting their aims, secured their accomplishment, that they became the approved instruments for securing shorter hours and larger pay for their members. The notable paradox has subsequently been realised, that, starting as organisations for aggressive or defensive war, they have afterwards won recognition as possible or even probable guarantors for the preservation of industrial peace. For they can supply negotiators, and enforce the agreement which is reached.

The Co-operative Movement.—Some influential thinkers, and some active reformers, observing the collision of interests between capital and labour provoked by the Industrial Revolution, have urged that the most promising, if not the only satisfactory, solution lies in some system or device by which these two classes would be merged together. Such was the aim, as they conceived it, of Co-operation; and “self-governing workshops” started, run and directed by the workers themselves, were favoured by Christian Socialists, such as Kingsley and Maurice. They found in this expedient the alternative to that revolutionary violence which in 1848 was overthrowing many Continental monarchies. The idea was encouraged and enforced by economists like John Stuart Mill. But neither this form of Co-operation, nor a modified approach to it in the shape of an industrial partnership between an employer and his employees, who receive a share of the profits gained, has met with more than occasional success; they have frequently encountered disappointing failure. The form of Co-operation, which has been triumphant, has been that of workmen, as their own shopkeepers, supplying themselves with goods retail and wholesale. And, while

in embryo the notion of abolishing "profit on price" may have taken birth in the fertile mind of Robert Owen, who was very conspicuous as a socialist reformer in the early years of the nineteenth century, it was not until the middle of that century, with the Rochdale Pioneers, that the plan of distributing the profits earned in such establishments among the customers or consumers in proportion to their purchases began its prosperous career. Trade Unionism and Co-operation of this kind have embraced in their adherents the aristocracy of labour.

The Monetary System.—Labour did not retain a monopoly of the important economic questions raised and solved between 1760 and 1850. The monetary system of the country was then determined; and the metallic and the paper varieties of money were both affected by the arrangements made. During the Napoleonic War, the Bank Restriction relieved the Bank of England, which had become the central institution of the banking hierarchy, of the necessity of giving cash or "specie" in exchange for the notes presented for payment at its counters. In other words, the paper-money became "inconvertible"; and, although at first the issue was managed with discretion, the danger usually, if not invariably, attendant on such measures subsequently appeared. With excessive issue the notes depreciated until, in pursuance of the recommendations of the Report of the Bullion Committee, "specie payments" were resumed. A brisk controversy followed on the proper mode of regulating a paper currency which was "convertible"; and in 1844 the Bank Charter Act embodied the views of the Currency as opposed to the Banking School. It made

provision for the conformity of the paper to the value of the metal by limiting the issue with no coin to back it to the amount which, it was held, would always remain in circulation, and by insisting that beyond that sum the action of the Bank should be purely automatic, and that notes should only be given in exchange for an equal sum of gold. At the close of the period of the Bank Restriction the metallic currency of the country was also placed on a mono-metallic basis. When Elizabeth undertook the process of recoinage, silver was the standard, by reference to which monetary bargains were adjusted. In 1696, when William III. engaged in the same task, the position was unchanged, although gold was received at Government offices at a certain rate in relation to the silver. But by the close of the succeeding century gold had displaced silver in current use, and, when the Bank of England resumed specie payments, gold became the single standard. That metal alone was received at the Mint for coinage in unlimited quantities, and payments of any amount were made in gold alone as "legal tender." The device of a token currency of silver and of copper was discovered and utilised. As such coins did not contain as much metal as was represented on their face, there was no temptation to export them to foreign countries; and thus a perplexing inconvenience, which had harassed statesmen and the public in previous times, was avoided. They were also limited as "legal tender" in the discharge of debt. Suitable "media of exchange" were thus secured both of coin and paper, but it has been doubted whether the stability of the "standard" was sufficiently considered or adequately guaranteed.

Fiscal Reform.—To Labour and to Monetary problems financial or fiscal reform must be added, if we would form a record tolerably complete of the important legislation and administration in economic matters of the period under review. The names of Pitt, Huskisson, Peel and Gladstone can be brought forward as marking successive stages of the process by which a new order was substituted for the old in this department of affairs. Pitt began the work ; but the financial stress of the great War against Napoleon intervened to arrest his aspirations. When peace was re-established Huskisson at the Board of Trade resumed the business of reform. Peel, famous especially for his action in the settlement of the Corn Law agitation, advancing further along the road which Huskisson had travelled, introduced changes in the fiscal system of which the repeal of the duties upon imported Corn was but one of many alterations conceived in a similar spirit, and designed to fulfil the same general aim. Finally Gladstone, by his budgets of 1853 and 1860, completed the task of simplifying the tariff. For there were two chief objects kept in view through this series of reforms, although each financier in his turn may have primarily addressed himself to the experimental handling of the immediate situation. One aim consisted in the substitution of a simple and effective scheme of producing a sufficient revenue in place of the cumbrous complicated mass of duties added to one another, which often annoyed and obstructed trade, without yielding more than a peddling sum. In place of that was substituted a plan by which a few taxes of small proportions were placed on certain articles of large consumption. Smuggling and evasion were alike discouraged by this effective means,

and simplicity was achieved. First Pitt established the principle of a single reasonable tax on each commodity affected. Next Huskisson replaced "prohibitive" by "protective" taxes. Then Peel tried to abolish those on raw materials including articles of food like corn. Lastly Gladstone swept away the large majority of the numerous duties which still remained.

Free Trade.—With this object of simplifying the tariff, which, though successful, may have been pushed too far, a recognition of the principles of Free Trade was associated. Although Huskisson might perhaps be called more correctly a "fair" than a "free" trader, Pitt frankly acknowledged the tuition of Adam Smith. The agitation for the repeal of the Corn Laws was conducted by the advocates of Free Trade; and Richard Cobden, a principal in that movement, negotiated for Gladstone in 1860 the Commercial Treaty with France. The fiscal system, which the reformers brought to an end, was the product of the Mercantile policy in its decadence. It rested on the idea that Governments could and should play a part in the direction of commerce and industry by means of fiscal arrangement. Free Trade, by contrast, asserted that trade should be allowed to flow in the channels of its own unfettered and unaided choice, neither encouraged nor discouraged by bounties or by duties. Taxation should be "for revenue alone" and for no ulterior or incidental object. If a customs duty was imposed on a foreign commodity, with which some product at home competed, an equivalent excise should be imposed on that domestic article. The rivals should be placed on the footing which they would have occupied had no taxation existed. For the same reason a preference

to goods produced by the constituent parts of an Empire could no longer be allowed. The tariff scheme, as it was finally framed in 1860 by Gladstone, the last in the succession of the fiscal reformers, embodied these Free Trade principles ; and he followed in this respect the example set by his predecessors. The governing intention at least was unmistakable, if minute transgression in detail could not be entirely avoided.

The Influence of the Economists.—We have already noticed the intimate connection of the economist Malthus, and his famous Essay on Population, with the question of the Old and New Poor Law. The influence of his friend and contemporary, Ricardo, on monetary matters was no less marked ; and the teaching of Adam Smith upon Free Trade was reflected in the attitude and acts of Pitt and those who followed his example in the reform of the fiscal system. About the middle, indeed, of the nineteenth century in England the sway of Economics, as stated by prominent authorities, and interpreted by less cautious and more irresponsible adherents, was paramount with educated popular opinion. There were, it is true, able and informed critics or disbelievers ; but the masters, who were sometimes hardly less dogmatic than their pupils, found an appreciative audience both in clever journalists and in the general public. One reason for this attentive and submissive hearing was that the current economic reasoning furnished simple, definite, concise replies to the questions which were being propounded. The answers given were positive and final. The solution of the problems presented was authoritative and plain. No doubt was harboured. No suggestion was made that a right decision could ambiguously be reached by

avoiding two extremes with impartial pains. To many minds it was not unwelcome to be spared the trouble of thinking for themselves ; and it was a relief to feel no hesitation or misgiving.

The New Economics was a Product of the Times.—Another and more potent cause of the “ popularity ” of the Economists in the sense of being leaders of opinion, and instructors of those busied with legislation and administration, could be discovered in the circumstance that the new Economics, taught by Adam Smith, Malthus and Ricardo, or represented as their teaching, was at once suggested by, and offered a rational explanation of, the new order of affairs introduced by the Industrial Revolution. A disturbing force seemed to have made its presence manifest in industry and trade, moving population from the quiet villages of the country into the noisy bustle of the factory towns. Men, women, and children appeared to be hurrying, or to be hurried, hither and thither, in search of profitable employment. Goods were being rapidly produced by elaborate machinery, propelled by a strange motive power, from materials brought from one corner of the earth, to be sold as finished articles in world-wide markets. Credit was rendering capital more mobile, and invention followed on invention with astonishing celerity. The simple principle of free competition between individuals following the alert enlightened pursuit of their self-interest, educed a rational harmony from the confusion ; and consistent order, it was thought, took the place of perplexing chaos. Economics thus resolved the tangle and answered the riddle. For the economists assumed the existence, and described the action, of individual competition ; and they treated

self-interest as being in the main a beneficent, and, beyond doubt, a constant and a potent, motive in the affairs of men in a modern community like England after 1760. The Economics of the succeeding century was in this way as much a product of the age as were the factories, the machinery, the canals and railways, and the banks. And it explained what otherwise seemed to be inexplicable.

Its influence was partly harmful.—Being thus the outcome of the fresh conditions of commercial and industrial life, it tended to confirm the circumstances which it interpreted. We have seen that economists opposed without success those Factory Laws and that Trade Unionism of which their distant successors for the most part have generally approved. They exalted the philosophy of “laissez-faire,” the yawning gaps in which have been afterwards disclosed. In that way, unfortunately, they lent some countenance to, and supplied some justification for, the evils of excessive individual competition. It was true that Adam Smith recognised and commended some notable exceptions to the practice of Free Trade. It was true that Malthus, proving a true prophet, considered that the doctrines of Ricardo would not hold; and Ricardo himself was a humane and practical reformer. But an impassioned advocacy of “natural liberty” is the most obvious feature of the *Wealth of Nations*, and Ricardo’s *Principles of Political Economy and Taxation* are confessedly an abstract statement of “strong cases” avowedly imagined. Incautious and enthusiastic followers of these teachers held and said that they could unlock every door, which was closed, with the magic key they possessed, and, deprecating the “interference” of the

State, they preached without intermission from the text of the supreme and indisputable virtue of the freedom of the individual. Little wonder then that the working-man, being told that "Political Economy was against" him, felt that it behoved him to be "against" Political Economy. Nor could Economics, thus proclaimed and interpreted, expect to be appreciated by those who, first exceptionally and afterwards more generally, took a wider and a closer view of the place and duty of Governments in the affairs of men.

SUMMARY

1. The period of English economic history from 1760 to 1850 was very important, and the term "revolution" is not inapplicable.
2. The agricultural changes marked an epoch; but, requiring inclosure as a condition of improvement, they wrought an injury to the humbler villagers, and the yeomen disappeared. Small farming gave place to large farming.
3. In manufacturing industry the domestic system was superseded by the factory. Mechanical inventions, the use of new motive-powers, and improvements in transport and banking were outstanding characteristics of the alteration wrought.
4. The changes gave rise to certain grave problems. Among those affecting labour was that of Pauperism.
5. The problem of self-help as an alternative to state-interference presented itself even more noticeably in connection with the Factory Laws. Their necessity was indisputable; their development was conducted on experimental lines.
6. The workmen, as compared with the children and the women, sought protection in Trade Unions, which, after many years, secured a legal status.
7. The Co-operative Movement was another instrument favoured by working-men, but it has developed chiefly

in a shape which its earlier advocates did not anticipate.

8. Monetary questions arose and were settled in relation both to the paper and to the metallic currency.
9. Fiscal reform in the hands of Pitt, Huskisson, Peel and Gladstone led to simplicity and the substitution of Free Trade for the Mercantile System.
10. The influence of the economists was considerable. The new Economics was a product of the age. It offered a rational explanation of the fresh conditions, but in some respects the influence exerted was harmful and not beneficial.

QUESTIONS

1. Can you justify the title Industrial Revolution as a description of the economic changes between 1760 and 1850 ?
2. Discuss the causes and the consequences of the Inclosures.
3. What do you understand by the Factory System ? To what influences was its introduction due ? How were its harmful results mitigated ?
4. Consider the probable consequences of the substitution of electricity for steam as a source of motive-power in manufacturing and locomotion.
5. Who was Malthus ? What were his opinions ? Why was the Poor Law amended in 1834 ?
6. Why, and with what justification, did the Economists oppose Factory Legislation and Trade Unionism ?
7. Trace the history either of (a) Monetary or of (b) Fiscal reform during the nineteenth century.
8. Account for the influence of the teaching of the economists in this period. How far was it in your opinion injurious or the reverse ?

LITERATURE

- W. Cunningham's *Growth of English Industry and Commerce*.
 W. J. Ashley's *Introduction to English Economic History and Theory*.
 H. O. Meredith's *Outlines of the Economic History of England*.

BOOK III
ECONOMIC THEORY

PART I.—CONSUMPTION

CHAPTER I

INTRODUCTORY

UTILITIES AND GOODS

WE have studied the past history of man's efforts to obtain a living, and the fundamental conditions which determine all his aims in that direction. We have now to follow analytically the process by which he gets his livelihood to-day, remembering that this depends upon conditions of an essential character which in their turn have their roots far down in the past.

Reason for studying Consumption First.—When we inquire why men display what we call economic activity, we discover at once that it is because they feel wants which they wish to satisfy. Most immediately connected with wants in any analysis of the subject is their satisfaction, and therefore it will not be illogical to study first of all that part of the subject which we have called by the name "consumption."

Definitions.—When anything has the power of satisfying human wants, we declare that it is "good," or

that it possesses "utility." In Economics, these words "good" and "utility" are made to apply to the things or services themselves. To give a definition, therefore, we may say that *a good or utility is anything which can satisfy a human want*. And here we must pause to caution the student that the word "good" is used of any such thing or service though it minister to a want which were better left unsatisfied. The idea from the economic standpoint is simply that the thing is good in the sense of being adapted to the want, however reprehensible the want may be. We should notice, too, that this definition of the term "good" includes not merely material commodities such as food and clothes, but also such immaterial things as personal services. The advice of a physician and a new invention are goods that we desire, and we are willing to pay for them, but they do not exist in any physical form. Goods or utilities, then, may be divided into the two great classes of (1) material things, and (2) personal services.

Free Goods and Economic Goods.—When we come to analyse goods further, we find that some of them are given by nature in such abundance that everyone may have his or her want satisfied without effort. Thus, air is a utility of the first importance; but in all ordinary circumstances it is so abundant that we can gratify our wish for it without exertion. All such goods, then, are for this reason called *free goods*.

But we find by hard experience that before we can satisfy many of our wants, either we ourselves must make an effort, or others must exert themselves for us. The reason is, that the supply of such utilities is limited either (1) by the *impossibility of increasing their number*

or amount at all, and this is so, for instance, with paintings by old masters, or (2) by the *need of labour and sacrifice to secure increase in their supply*, as in the case of watches and houses, and; indeed, of the greater number of things with which we are daily brought in contact.

Inasmuch as these goods are limited in quantity, they can, as a rule, be obtained only by human exertion or sacrifice. And being thus obtained, they can be exchanged or transferred from hand to hand by those who possess them. Obviously, many goods—land, for instance—are of such a nature that they cannot be readily transferred or, in some instances, be actually transferred at all. In such cases, transfer of title takes the place of actual transfer of the goods. Again, it is, of course, impossible for one man to transfer to another any special ability that he may possess. But the services which ability of this kind may enable him to render may be exchanged for the services of others or for material goods, and we may regard such services as coming into the same class as the other goods which we have been describing. All such goods we call *economic goods*, because they are those which man spends his life in acquiring, and because the want of them and the efforts and sacrifices made in obtaining them are susceptible of the money measurement which enables them to be the subject of scientific analysis. To sum up the matter in the form of a definition: *Economic goods are goods which are so limited in quantity that their possession, on the one hand, requires regularly exertion or sacrifice, and, on the other hand, gives the opportunity for transferring or exchanging them.*

When we speak of *economic goods taken collectively* or

in a body, we use the word "wealth," whether the mass of such goods be great or small.

Different Kinds of Utility.—There are only four ways in which goods can satisfy our wants. In the first place, a good fulfils this aim by virtue of the elements or substance of which it is composed. Thus, coal is so constituted that under certain conditions and in certain relations it produces heat. This utility which a thing possesses by virtue of the elements of which it is composed we may call (1) *elementary utility*.

But the coal as it is in the mine is not ready to satisfy man's wants. It must first be broken up by the miner into such fragments as are convenient for man's purposes. Its form must be changed. This utility which a good possesses by virtue of the form in which it exists we call (2) *form utility*. Manufacturing gives as its result form utilities, and we generally think of manufactured products when we speak of this kind of utilities.

When the coal has been changed by labour into a form fitted for human use, it is still necessary to convey it to those who are to use it. The new utility which is given to the coal by moving it from the mine to the place where it is to be used we call (3) *place utility*.

Finally, this coal which possesses *elements* fitting it for human use, which has had its *form* changed by the miner, and which has now been transported to a *place* convenient for its consumption, is kept until the *time* when it is to be used. The utility which a good possesses by virtue of its being present at a time convenient to the consumer we call (4) *time utility*.

Elementary utility, form utility, place utility, and time utility : these, in their logical order, are all the

kinds of utility that any goods ever do or can possess. Goods about to be consumed, of course, have all four kinds of utility ; but in the case of any particular commodity some one utility is likely to be of special prominence. Thus, ice in summer has as its most evident utility that of time. In the same way, great place utility is added to tea when it is carried from China or Ceylon to the consumer in an English town.

Wealth Consumption.—Man satisfies his wants by the enjoyment of these utilities which we have been describing. In many cases their enjoyment necessarily involves their destruction by the person who enjoys them. But there are things the utilities of which are destroyed, not by the user, but by natural forces. In such cases, the destruction is usually gradual and slow. Thus, a house furnishes its utilities to the user through a long period of years. *The direct satisfaction of human wants by the enjoyment of the utilities in goods is called consumption.* When goods afford such direct satisfaction only in a single act of enjoyment, they are termed *perishable* goods. Such, for instance, are coal and food. But a house, a book, or a carriage furnishes satisfaction to human wants by repeated use. To select an extreme instance, land may be made to afford satisfaction to human wants through all time. These are *durable* goods. Defining, we may say that *perishable goods are those that lose their utilities in a single satisfaction of human wants*; *durable goods are those that give repeated satisfaction to human wants.*

Productive Consumption.—Some authors include under the name consumption a destruction of utilities which is designed to result in the creation of new and greater utilities. Thus, when coal, instead of being used

in a residence to warm the occupants, is burnt in the engines of a factory, it is often said that the coal is being consumed productively. If we call such consumption *productive consumption*, we must find some distinguishing word for referring to a destruction of utilities which satisfies human wants directly. The expression adopted for this purpose is *final consumption*. But since productive consumption is only a part of the process of production, we may fairly limit the use of the word "consumption" to the final and immediate satisfaction of human wants by the enjoyment of the utilities furnished by goods.

Relation of Consumption to Production.—We must, for scientific reasons, mark somewhere a distinction between consumption and production, although, as we have seen, the two often shade into one another. Consumption and production work together. Consumption furnishes the motive for production. Production affords materials and services for consumption. Consumption makes production necessary at the same time that it renders it possible. To sum up in a sentence, consumption is the end and means of production, and of all economic activity; production is the means of consumption.

SUMMARY

1. Since the satisfaction of wants forms the motive of all economic activity, consumption may properly be made the first division of economic theory.
2. The character and extent of human wants have been changing progressively.
3. Want-satisfiers are called utilities or goods.
4. Free goods are unlimited in quantity and cost us nothing;

economic goods require economic activity if they are to be got and used.

5. There are four kinds of utility : elementary, form, place, and time.
6. Consumption is the use of goods in the final satisfaction of human wants.
7. Consumption is the end and means of production ; production is the means of consumption.

QUESTIONS

1. Why is consumption first studied ?
2. What is a utility ? Illustrate. What are free goods ? Illustrate. What are economic goods ? Illustrate. Is water ever an economic good ?
3. Give examples of elementary utility ; of form utility ; of place utility ; of time utility. What utility does the miller produce ? The railway ? Explain the fallacy of the statement that the farmer alone is a producer.
4. Give examples of perishable and durable goods.
5. Why cannot the name consumption be applied to the use of corn in fattening hogs ? In what sense is coal burned in a factory furnace consumed ? Is the consumption of food by labourers final or productive consumption ? Explain.

CHAPTER II

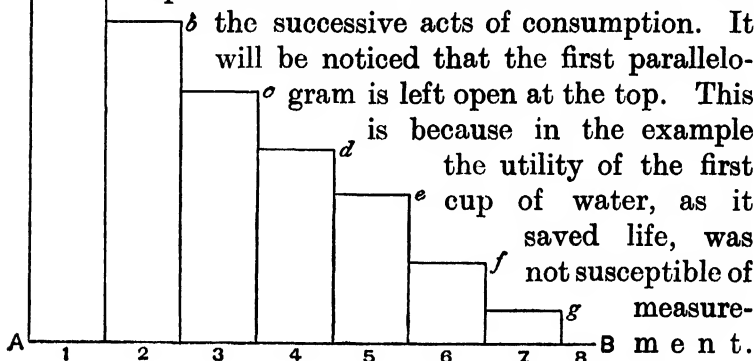
THE LAW OF DIMINISHING UTILITY

Illustrations of the Law.—The wants of men are innumerable and, considered as a whole, are never satisfied. There seems to be no limit to the variety of things desired. But, if we select any one commodity, we find that our desire for it is limited. We have all heard of the king who wanted gold and then got so much that he finally loathed the sight. This story of the King Midas is but an illustration of what economists call the *law of diminishing utility* or the *law of satiable demand*. Let us consider the case of a desert traveller who, having exhausted long before his supply of water, comes upon an oasis with a cooling spring. The first cup he drinks may save his life, and would therefore have utility which we may call *absolute*. A second cup may still have a very high degree of utility ; but, if we suppose him to continue drinking, we then know that the later additions to his satisfaction will gradually grow less, and that he cannot proceed without arriving at a point where any further consumption will cause no pleasure but pain.

This is graphically represented in the figure on page 107.

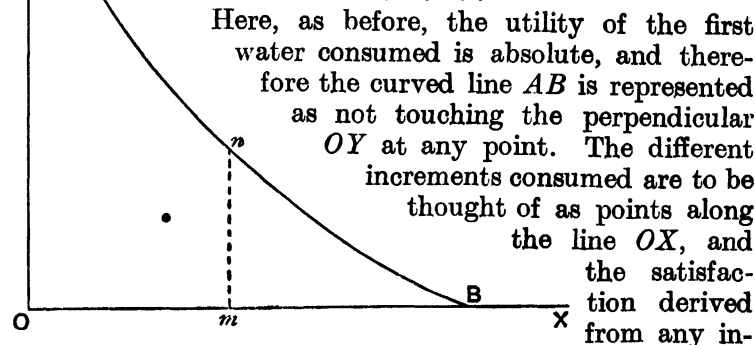
In the figure, let the equal spaces 1, 2, 3, 4, 5, 6, 7 on

the line AB represent equal quantities of water, and let the perpendicular lines represent the height to which satisfaction rises in drinking the respective quantities. Then the parallelograms would represent the total satisfaction derived from



The line at the right, therefore, is to be conceived as continuing rather than as terminating at the point a .

If now we think of the man as drinking successive quantities of the water which are very small—mouthfuls, for instance—our figure would need to be drawn as follows :



the curve of diminishing utility. The curve cuts

the horizontal OX at the point B , representing the stage at which utility from the water ceases, and disutility would begin should consumption still continue.

With the figures and example clearly in our mind, let us consider some of the particulars. Each unit of the commodity consumed is called an *increment* of supply or an increment of consumption. The utility of the first unit, which in this case is absolute, is called the *initial* utility. The potential utility of an increment not actually possessed or consumed is called the *marginal* utility. But note this. In our diagram, and in the example, we have assumed that the consumption of water is carried to a point beyond which further consumption would give no satisfaction, and therefore the marginal utility in this case is 0. But, if we had assumed that the consumption had stopped at m , then the marginal utility of the consumption would be represented by the utility of the unit m , as measured by the perpendicular mn .

But the law which we are studying is of wider application. It does not concern consumption alone. It applies as well to possession. Whenever we have a stock of any commodity, we realise that it possesses a utility for us even when we are not in the very act of consuming it. The law therefore applies to the utility of the commodity whether we are then consuming it or are retaining the power of doing so at some future time

Formal Statement of the Law.—We are now prepared to understand a formal statement of the important economic law of diminishing utility. It is as follows : *At any given time the marginal utility of any commodity to its owner decreases with every increase of the stock possessed or supplied.*

Limitation.—Notice that this statement of the law contains the qualification, *at any given time*. The

importance of this caution becomes evident when we return to a consideration of our example. We know that when the utility of water has fallen to zero, we need not wait for long before the satisfaction to be derived from consumption will again be keen. With the consumption of some things the importance of the qualification becomes even greater. A boy finds that any clothing beyond a very small amount has a low added utility for him. But, as he grows into young manhood, his wants change so far that a much larger supply of clothes has as great a marginal utility as his slender stock possessed before. Whenever different times are considered, therefore, we must make complete allowance for the change of wants in the interval.

The Case of Money.—With this in mind, we may say that the law of diminishing utility applies to money as to all other goods, although the rate of diminishing utility is much slower, because money represents general purchasing power and permits variety in consumption. With such variety, as we all have known from experience, satiety is reached more slowly than without it. Nevertheless, at any given time the hundredth pound of a man's wealth has a lower utility than the ninety-ninth or any other preceding pound. Thus it follows that to a rich man, other things being equal, money has a less marginal utility than it possesses for a poor man.

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SUMMARY

1. The law of diminishing utility explains how increasing supply means decreasing utility per unit of supply.
2. Initial utility is the utility of the first unit ; marginal utility, the potential utility of a unit not possessed ; total utility, that of all the units.

3. The law of diminishing utility applies to money as to other commodities.

QUESTIONS

1. How great is the marginal utility of air under ordinary circumstances ? Why ?
2. How does the law of diminishing utility apply when the consumption of commodities is carried beyond the point of zero utility ? Illustrate by a diagram.
3. Give illustrations of the importance of the qualifying phrase " at any given time."
4. What significance has the law in its bearing on the comparative condition of the rich and the poor ?

CHAPTER III

DEMAND

The Economic Order of Consumption.—It follows from the law of diminishing utility that men in satisfying their wants consume commodities in fairly regular order. So far as they consume things to the best advantage, their consumption is based upon a balancing of these two considerations,—the *utility of the goods, and the cost of procuring them*. Therefore, in deciding what wants they will first satisfy, *they will choose those commodities which promise the greatest surplus of utility over cost*. At the first glance the matter is simple. To a starving man, the wish for food—or its marginal utility—is obviously so great that he devotes all his energies to the satisfaction of that want. But, his hunger once somewhat appeased, the unsatisfied want—the marginal utility—of some other good appears great by comparison, and he turns his energies in this direction. From these instances it might seem, indeed, that men always seek to get those things for which they have the greatest unsatisfied desire; in other words, that they try to keep the marginal utilities of all commodities equal. But a moment's reflection will make it evident that the different degrees of sacrifice involved in getting the different commodities prevents any such

adjustment of marginal utilities. My desire for an automobile may be vastly greater than that for a camera, but, if I must sacrifice a whole year's income to procure the automobile, I may prefer to buy the camera. It is the relation between the unsatisfied want and the sacrifice required to satisfy the want that determines choice.

To make this clearer, let us take a detailed example. Suppose a boy with half a crown to spend standing before a booth at a fair, and bent on satisfying a want for the goods there displayed. If plums are sixpence a pint, it may be that his liking for them will be great enough to cause him to make a pint of them his first purchase. But he knows that a second pint will satisfy a want less keen than is satisfied by the first. We may imagine him, then, spending his second sixpence on gingerbread. In the same way, it may be, a first glass of lemonade will give him greater enjoyment than would a second pint of plums or a second piece of gingerbread. It is possible that he has no strong desire for the other goods displayed, and that he can get greater satisfaction from a second pint of plums than from anything else that he could purchase, although they will afford less enjoyment than he will have from either the gingerbread or the lemonade which he has bought. Again, it is quite possible that he will like a second glass of lemonade better than a third pint of plums or even a second piece of gingerbread, because the action of the law of diminishing utility is more rapid in his consumption of gingerbread than in his consumption of lemonade. Now the boy has purchased with his five sixpences two pints of plums, one piece of gingerbread, and two glasses of lemonade. The case is the same whether he buys them all at the same time or distributes his purchases throughout an afternoon. He makes his purchases according to his judgment of their varying utility in such a way that he will receive the maximum enjoyment from his expenditure.

Illustration by Diagram.—Let us illustrate this as before by the diagrams which follow :

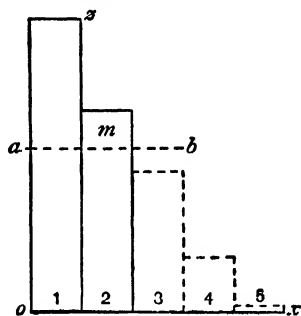


FIG. 1.

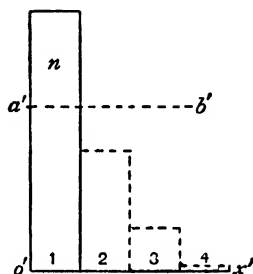


FIG. 2.

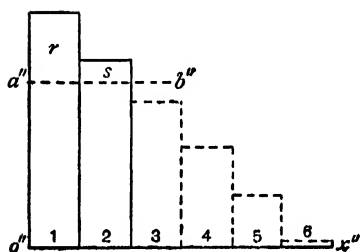


FIG. 3.

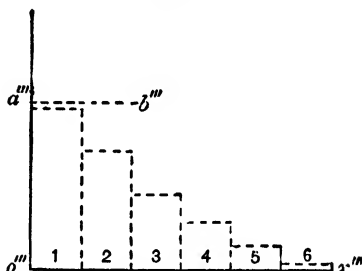


FIG. 4.

In these figures the lines ox , $o'x'$, $o''x''$ represent amounts of the respective commodities which would reduce the marginal utility to zero ; in other words, they represent amounts such that in no case would the boy care to consume more of the goods. Let the parallelograms represent the satisfaction derived from the consumption of the different units. It will be noticed that the utility of the first unit is greatest in the first diagram, and that it becomes less in each succeeding figure, but that the utility diminishes more slowly in Figure 3 than in Figure 2. Now let the cost of each unit be measured by the distance between ox , $o'x'$, etc., and ab , $a'b'$, etc., since this distance is the same in all cases, and in our illustration measures the sixpence which each unit costs. In the diagrams it is evident that the first

purchase will be made of the commodity represented in Figure 1, because the surplus of satisfaction over cost is greatest in that case, as this surplus is measured by the parallelogram *az*, which is larger than any of the corresponding parallelograms *m*, *n*, *r*, *s*. The parallelogram *n*, which represents the surplus of utility over cost of the first unit of the second commodity—in our illustration, gingerbread—is greater than the parallelogram *m*, which represents the surplus of utility from a second unit of the first commodity, and is also greater than the parallelogram *r*, which represents the surplus utility from a first unit of the third commodity—in this case, lemonade. It will, therefore, represent the second purchase. In the same way *r*, being next in size, represents the third purchase; *m*, the fourth; and *s*, the fifth. Notice that, while the first unit of the second commodity affords a surplus, the second does not. Again, notice Figure 4, which represents some commodity that the boy is not tempted to purchase with the stock of money in his possession.

It will be interesting and valuable practice for the student to vary these figures to represent different suppositions regarding consumption, and to carry the process one step farther by supposing the units of the commodity to be so small that the diminishing utility will be represented by a curved line instead of by the broken lines that form the top and part of the right side of the parallelograms in our illustration. Another variation might well be to make the costs vary from commodity to commodity.

We are now prepared for a formal statement regarding the economic order of consumption. So far as commodities are purchased and consumed rationally and economically, (1) *choice is in every case determined by the amount of the surplus of utility over cost*. It follows as a natural corollary that (2) *each successive choice is dictated by the desire that the surplus of utility of the commodity to be consumed shall be greater than the*

surplus which any other commodity of equal cost could yield.

How Economic Importance is Determined.—Each consumer estimates the economic importance of any commodity, not upon the basis of its total utility, but upon the basis of its marginal utility. In other words, its importance is measured, not by the total amount of satisfaction that it can afford, but by the keenness of the desire or want that he would feel if deprived of any portion of the supply. In a place where I could not make any purchases of goods, nor add to my stock in any way for a considerable time, supposing I had in addition to other goods fifty barrels of flour and only three pounds of sugar, I should evidently husband the sugar more carefully than the flour. In other words, I should calculate that with the existing stocks a pound of sugar had a greater economic importance for me than a pound of flour. If, however, instead of the greater quantity of flour, it was so small that ordinary consumption would finish it before the stock could be replenished, I should attach the greater economic importance to the flour instead of the sugar. In either case my reason would be the same. In the first case sugar would have a greater marginal utility than flour, because diminution in its supply would leave me with an unsatisfied want keener than that following an equal diminution in the stock of flour. But in the second case the flour would have the greater marginal utility, since a decrease in its supply would involve actual hunger before the stock could be replenished.

It is instructive to compare the relation between the marginal utilities of two commodities with the relation between their total utilities. Thus, a pound of gold has

a greater economic importance than a pound of iron ; but the total amount of iron in existence has greater importance than the total amount of gold.

THE LAWS OF DEMAND

We have already explained that the study of human wants is directly connected with the study of consumption, and that the study of consumption leads to the study of demand. But we must note that a want for anything is not the same thing as a demand for it. "If wishes were horses, then beggars might ride." In order that there may be a demand for a thing, there must be not only a desire for it, but also the willingness and the ability to offer for it some sacrifice. In other words, to speak in the language of everyday life, we must not simply want the thing, but we must want it enough to pay for it. It must be remembered, therefore, that in Economics, *demand signifies desire backed by means or purchasing power.*

But, in addition to this definition of the real meaning of the word "demand" in Economics, we need a definite way of measuring its intensity. Such a method of measurement is found in *the number of units of any commodity which will be purchased at a given price.* If a table be constructed of the different quantities of a commodity which would be purchased at different prices, such a table will describe what economists usually call the *state of demand* for the commodity. If to-day the people of a certain community are willing to buy

100 bushels of apples at 2s. per bushel,
300 bushels of apples at 1s. per bushel,
500 bushels of apples at 9d. per bushel,

this list or table, we say, shows the present state of demand for apples in the community. The demand for a commodity is said to increase when the quantity that will be taken at a given price increases.

Let us now consider one by one the conditions which determine in any case whether the demand shall be large or small. The formal statement of these conditions may be regarded as a statement of the *laws of demand*.

1. *The Quantity demanded varies directly with the Marginal Utility*.—Suppose, in the first place, that the price of a certain quality of tea remains during a certain period at two shillings the pound, and that during the same period the wealth of the consumers also remains the same. Then it is evident that, if the public taste for any reason changes in such a way that the marginal utility of tea becomes less or greater, the demand will fall off or increase to correspond. The importance of this law is especially evident in the case of commodities the demand for which is subject to sudden and violent fluctuations through changes of fashion.

2. *The Quantity demanded varies inversely with the Price*.—Again, suppose that the wealth of consumers remains the same, and that there is no change in the marginal utility of the commodity. Then it is evident that the amount demanded will be greater when the price is low and smaller when the price rises. The relation between price-changes and resulting changes in demand varies with different commodities. Thus, in the consumption of wheat, for instance, while it makes a difference in the demand whether the price stands at three shillings or at five shillings a bushel, the difference is not so great as in the case of articles which satisfy less urgent wants. On the other hand, a fall

in the price of certain articles, especially luxuries, is promptly followed by a demand greatly increased. When changes in demand resulting from changes in price are relatively great, the demand is said to be *elastic*.

3. *The Quantity demanded varies directly with the General Wealth.*—In the third place, if we suppose the marginal utility of any commodity and its price to remain the same, it is evident that anything which increases the purchasing power of the community will increase its demand for the commodity. For increase of wealth, as has been explained, lowers the marginal utility of money, and makes it possible to spend more for other commodities without losing that surplus of utility over cost which determines purchases. As is pointed out elsewhere, it is the general wealth of the people of a country, leading to an increased demand for commodities, that offers the special opportunity for abnormal profits to monopolists. The monopoly price—or the price at which a monopolist can secure the greatest net returns—is likely to be higher in England than in countries such as Spain or Italy.

The whole law of demand, then, may be summed up in a single statement as follows : *The quantity demanded varies (1) directly with changes (a) in the marginal utility and (b) in the purchasing power of the community, and (2) inversely with changes in price.*

Statistics of Private Consumption.—Further light is thrown on the principles which we have been studying by the actual facts regarding the expenditures and consumption of families. A detailed statement of the income and outgoings of a family is called a *family budget*. Careful studies of such budgets have been made in Germany and Great Britain and in some of the

American States, notably Massachusetts and Illinois. On the basis of the German statistics, the following table of percentages has been prepared :

ENGEL'S LAW.—SAXONY

ITEMS OF EXPENDITURE	PERCENTAGE OF THE EXPENDITURE OF THE FAMILY OF		
	A working-man with an income of from £45 to £60 a year	A man of the intermediate class with an income of from £90 to £120 a year	A person in easy circumstances with an income of from £150 to £200 a year
	per cent	per cent	per cent
1. Subsistence - - -	62.0	55.0	50.0
2. Clothing - - -	16.0	18.0	18.0
3. Lodging - - -	12.0	12.0	12.0
4. Firing and lighting - -	5.0	5.0	5.0
5. Education, public worship, etc. - - -	2.0	3.5	5.5
6. Legal protection - -	1.0	2.0	3.0
7. Care of health - -	1.0	2.0	3.0
8. Comfort, mental and bodily recreation - - -	1.0	2.5	3.5
Total - - -	100.0	100.0	100.0

The following table permits a comparison between the conditions obtaining in different countries :

COMPARATIVE PERCENTAGES OF EXPENDITURES BY THE FAMILIES OF WORKING-MEN IN ILLINOIS, MASSACHUSETTS, GREAT BRITAIN, AND GERMANY

ITEMS OF EXPENDITURE	ILLINOIS	MASSACHUSETTS	GREAT BRITAIN	GERMANY	AVERAGE
Subsistence - -	41.38	49.28	51.36	55.00	49.25
Clothing - -	21.00	15.95	18.12	18.00	18.27
Rent - -	17.42	19.74	13.48	12.00	15.66
Fuel - -	5.63	4.30	3.50	5.00	4.61
Sundries - -	14.57	10.73	13.54	10.00	12.21
Total - -	100.00	100.00	100.00	100.00	100.00

As a result of his study in 1857 of family budgets, Dr. Ernst Engel, an eminent German statistician, laid down the following general laws of consumption, which is sufficiently illustrated in the tables just given :

As the income of a family increases,

- (1) *The percentage of expenditure for food decreases ;*
- (2) *The percentage of expenditure for clothing remains approximately the same ;*
- (3) *The percentage of expenditure for rent, fuel, and light is invariable ;*
- (4) *The percentage of expenditure for education, health, recreation, etc., increases.*

From the figures given in the tables it is evident that demand for food in any community is not very elastic, as enough for subsistence is required in any case, and the relative amount demanded by all classes falls off rapidly as these needs are satisfied. On the other hand, increased wealth results in an increasing demand for all the manifold goods and services that minister to what we may term culture-wants.

Since the satisfaction of man's higher wants is necessary to his complete efficiency as a producer, we can understand from the tables how it is that " the destruction of the poor is their poverty." They live in a vicious circle. The poverty to which they are born is itself the bar to their escape. Once free them from this condition, and the power to guarantee and perpetuate their own prosperity is placed in their hands ; for they thus become more efficient as producers and more skilful in securing a just share in the increased product of their labour.

SUMMARY

1. Men seek in their consumption to secure the greatest possible surplus of utility over cost.
2. The economic importance of a commodity is determined by its marginal utility.
3. The quantity demanded varies directly with the marginal utility of the goods and the wealth of the consumers, and inversely as the price.
4. Increase of fortune usually means an increase of expenditure on the comforts and decencies of life.

QUESTIONS

1. Draw diagrams roughly representing the initial utility and the diminishing utility of some different kinds of consumption in your own case.
2. Which has the greater economic importance for men, water or gold ? Water or wheat ? Why ? Contrast other commodities in the same way.
3. How do we estimate marginal utilities in everyday life ?
4. What would be the relative effect upon demand for automobiles and wheat if the prices of both should fall proportionally ? Why has the price of copper remained high in spite of the great increase in its supply ? How does the sudden death of a King or Queen affect the demand for mourning goods ? Why ?
5. What percentages of their incomes do different persons in your community spend for the different kinds of things mentioned in Engel's law ?

LITERATURE

The Board of Trade has lately made reports on the Cost of Living in this and other countries, *e.g.* France and Germany.

C. Booth: *Life and Labour in London*; B. S. Rowntree: *Poverty, a Study of Town Life*; and M. R. Davies: *Life in an English Village* may be mentioned as the more notable of a number of recent studies of the conditions of living in England, with reference to household budgets and other similar data.

From the Board of Trade Reports it has appeared that an English working-class family migrating to France and trying to maintain its standard of comfort might find rent slightly lower, and food and fuel about 18 per cent. dearer; and, going to Germany, it would discover that rent was about 23 per cent. more, and food and fuel about 18 per cent. more. These, however, were no more than rough comparisons of the relative cost of living.

CHAPTER IV

THE ECONOMY OF SPENDING AND SAVING

Two important questions regarding economy in consumption remain to be studied. The first question is, briefly, How can the whole expenditure or consumption be so distributed between the present and the future that the greatest amount of satisfaction will result? The second question assumes that the first has been answered, and asks how the consumption of the present may be so ordered that it will result in the greatest total of satisfactions? Though both questions really are connected with expenditure, we yet commonly think of the first as the problem of saving, and distinguish it from the problem of spending, which is represented in the second question.

I. THE ECONOMY OF SAVING

First of all it should be noted that the proportion between present and future expenditure conforms to the general rule which has already been laid down as the law of the "economic order of consumption." We seek always in our expenditure to secure the greatest surplus of utility over cost; hence we discontinue present expenditure when we feel that we can secure

a greater surplus of utility by applying any remainder of our purchasing power to future purchases. Of course, with many people the demands of the present are so urgent, and their means so limited, that there is little opportunity for any such balancing of present and future surpluses. But, whenever there is any saving at all, it proceeds according to the mental comparison just explained.

Hoarding.—But how are goods saved? Manifestly, we may save goods in such a way that neither we ourselves nor others can enjoy them in the present. Thus it is claimed that the peasants of France are so distrustful of banks that they lay by or *hoard* their savings in secret places about their homes. Such saving, though it is not the best, is better than harmful or luxurious consumption in the present; for, if the goods, such as money, for instance, be so stored away that they will not suffer harm, they may in the end minister to real and commendable wants.

Investment.—But in modern times, with security of property guaranteed by a strong government, and with easy opportunities for devoting savings to productive uses which will return a regular income, most provident people prefer saving by *investment* to saving by hoarding. Moreover, as industry becomes more complicated and requires more and more skill for successful management, a greater number of people prefer to intrust their savings to the hands of others rather than to invest them directly. The process is even carried one step farther in the majority of cases. Instead of lending their savings directly to those who manage productive enterprises, men deposit their savings, in the form of money or credit instruments, in banks, and the banks

in turn take upon themselves the decision of the enterprises in which such savings may be most safely and profitably invested.

The difference between hoarding and saving by investment is, briefly, that in the one case the goods *may ultimately* be used productively and economically, while in the other case the goods saved *are saved by being used thus productively*.

The fact that money represents goods in general is likely to cause us to overlook the real nature of saving. From the *individual* standpoint, saving means the postponement of consumption. When a man saves a pound from his week's income, he is postponing to a future time the exercise of his right to receive goods to that amount from his fellow-beings. He may do this either by hoarding the money or by lending it to some one else. But such acts do not necessarily result in saving from the *social* standpoint. Social saving means greater enjoyment in the future on the part of the community as a whole. If A lends to B money with which to buy a suit of clothes, A individually has saved, but there has been no social saving, for there will not be more goods to enjoy in the future on account of this act. But if, instead of asking other men to make a suit of clothes for him, B had told them to construct a machine, there would also have been social saving, because the machine would render it possible to produce more goods in the future. Modern societies save chiefly by improving their facilities for producing goods ; the amount of food, clothing, etc., that the people of England store up for future use is comparatively small.

We often hear men talking as if the man who spends money freely were a public benefactor, while the man

who is not thus lavish is to be regarded with reproach. But it is plain from the previous account that the former is using up goods and services now, while the latter may through his investments be improving the productive equipment of society. The one is telling men to serve him in his home, in his stables, and aboard his yacht; the other is setting them to work building factories—he is saving socially. It is true, this may in its turn be pushed too far. Just as the farmer may have too many ploughs and wagons, so we as a nation may have built too many railroads and cotton factories for present needs.

II. THE ECONOMY OF SPENDING

Having considered the first of the two questions which were raised at the beginning of this chapter, we have next to answer the other,—the question how to order the present consumption that the greatest good may result.

First of all, for economy in spending, two things are essential, which we may call (*A*) *the economy of right choice* and (*B*) *the economy of right use*. The economy of right choice depends upon a correct knowledge of those present uses to which commodities may be most advantageously applied, while the economy of right use depends upon a knowledge of the most efficient means of applying the goods to those uses.

(*A*) **The Economy of Right Choice.**—1. *Luxury*. There is a lack of economy in consumption, due to a failure to exercise right choice, when men apply their means to the purchase of luxuries. Expenditure for luxuries, or luxurious consumption, is not economical

consumption, because it does not adapt resources to their most advantageous use. The subject of luxury is difficult to discuss, because a definition of the thing itself is by no means plain. Many goods are to-day easily obtained by the poorest which two centuries ago could be enjoyed only by the most wealthy and powerful. Such goods are never treated as luxuries in modern days, but, if their possession in the olden time required the exploitation of the poor, and did not render their possessors able and willing to confer great social service in return, we must hold that they were then luxuries. To the illiterate man, a library is a luxury ; to the scientist, it may be a necessity for complete efficiency. These illustrations may serve to show the difficulty of reaching any simple and clear definition of luxury, and the difficulty, no less formidable, of establishing any universal principles by which we may always judge such expenditure. Yet it is possible to lay down a definition which implies a principle of social economy in expenditure, and suggests an ethical precept : *Luxury consists of any consumption of commodities and services which is seriously disproportionate to the social service that they render possible, but is not of necessity directly injurious to the consumer.* As we have hinted, the principle here indicated should be used with caution. If the possession of great talents calls for large expenditure to render those talents more efficient, then small consumption would be wasteful, and large consumption would not be luxurious.

But, it may be asked, has not a man the right to do as he will with his own ? And the answer must be, Yes, in a very full measure, if you judge right solely by the statute law. No court had appointed Cain to the

guardianship of Abel. But the statute law follows only slowly and haltingly after the growing sense of right and duty as that develops in the race. The laws of to-day grant extreme rights of property and use, because it has been found that on the whole men have worked harder, produced more, and been happier when they were given such rights, almost unlimited as they may be, of disposing of what they have produced. Now, however, men are becoming more socially inclined. More and more, rich and talented men are tending to regard their riches and their talents as trusts which have been committed to them, rather than as possessions which they may squander without thought for their fellows. When this feeling of responsibility of stewardship becomes sufficiently developed, our law may safely be changed to recognise the change in the idea, and compel the unsocial to feign the virtue if they have it not. Indeed, save in exceptional instances, there may be no need for a change in the law, as public opinion would be powerful enough to accomplish the purpose of checking a lavish display.

Caution.—But we must revert to our caution. Too great penuriousness is an evil only less serious than prodigality. We must not forget that a rational expansion in the number and variety of human wants is necessary to human progress.

2. *Harmful Consumption.*—In speaking of luxurious consumption, we have said that it does not necessarily involve immediate and direct harm to the consumer himself. When such harm does result, it is more usual to speak of the consumption as harmful rather than luxurious. It goes without saying that harmful consumption calls for the censure of the economist no less

than that of the ethical teacher, for it is in the highest degree wasteful, whether regarded from the standpoint of the individual or of society. When a nation devotes a large amount of its labour and capital to the production of commodities which, in their consumption, cause more misery than happiness, and weaken the nation's future resources of energy and intelligence, there is a departure from economical consumption so serious as to call for the severest condemnation. If society would forego such injurious consumption, bread would be cheaper, higher wants would find satisfaction, and man would be moving away from the beast's low level of mere sensual gratification.

Some Rules for Economy in Choices.—We may exercise an influence over the growth of our own wants in such a way that a great real satisfaction may flow from a comparatively small expenditure. Thus, (1) we should cultivate enjoyment or consumption that is *comprehensive* or *inclusive* rather than exclusive in its nature. It is evident that if a community can cultivate such a love for art that its satisfaction will consist in viewing beautiful pictures or statues rather than in owning them individually, it will be possible to secure such satisfaction most economically by joint purchase. Again, (2) we should cultivate *harmonious* consumption. We all know, to take a homely example, that bread and butter together give a greater enjoyment than would result from the consumption of the two separately. But harmony of consumption is by no means limited to such simple cases as this *Whenever a group of commodities produces in combination a greater satisfaction than results from the consumption of the same commodities separately, the consumption of the group is harmonious*

consumption, and is most economical. Finally, (3) we should cultivate *variety* in consumption. The greater the variety of goods consumed, the higher will be the marginal utility of the goods, and hence the keener the satisfaction in their consumption. Moreover, the wider the range of his pleasures, the more certain is a man to find satisfaction under widely varying conditions, as when he is travelling among strangers. To take a simple instance, a family with little variety of taste or desire in the matter of food is at the mercy of price changes within that limited range of food purchase, while those who have cultivated various tastes are able to give up the consumption of any one form of food, when it becomes expensive, without great loss of enjoyment. If the English people would cultivate a taste for other kinds of bread than that made from wheaten flour, they could get their satisfaction from the other kinds of bread as well as from the wheaten bread itself more cheaply than they now do.

(B) **The Economy of Right Use.**—Hitherto, we have been speaking of a lack of economy due to the failure to appropriate articles and services to their most advantageous use. But even when they are so applied, there is generally some waste in the method of using them. It is not improbable that more waste arises in this way than in the other, though the harm to character is, of course, incalculably less.

The Economic Importance of Housekeeping.—It is here that the great influence of the wife and mother can be seen. Probably not less than three-fourths of the income of the average family depends, for the economy of its expenditure, upon the woman to whom the affairs of the household are intrusted. The import-

ance of this consideration has often been overlooked. English, as compared with French or German housewives, have incurred the reproach of wasteful methods of providing food for the family. Such waste may result (1) from the choice of foods that contain relatively little nutriment ; (2) from the choice of foods not well suited to the particular needs of the consumers ; (3) from failure to utilise all the material that is purchased and that would supply nutriment ; (4) from bad preparation of the food ; (5) from failure to utilise to the full the fuel devoted to cooking. Similar wastes are repeated in the matter of clothing. It has been calculated by careful investigators that through these channels there is great waste of the ordinary family income. If some of these calculations be correct, we may conclude that a stoppage of such waste would enable the average family to secure the same enjoyments with a shorter working day for the workers of the family, or to increase appreciably the sum of their enjoyments without any increase in the amount of work required.

SUMMARY

1. Economy in consumption requires an economical balancing of expenditures between the present and the future, and an economical ordering of present expenditure : the one is the economy of " saving " : the other, the economy of " spending."
2. Saving, unless it is merely hoarding, is really spending for the future. Therefore, a wise balancing of present and future is secured by the mean between prodigality and parsimony. The prodigal is not a public benefactor.
3. Economy in present consumption requires right choice and right use of the things chosen.

4. Luxury and harmful consumption both violate the rule of right choice. Inclusive, harmonious, and varied consumption is most economical.
5. The economy of right use depends largely upon the home maker.

QUESTIONS

1. Discuss the fallacy : "Spending money makes trade good."
Why and how does the man who saves spend ? Through what agency is this spending usually effected in modern society ?
2. What two general principles must be observed in economising on present expenditure ?
3. What is luxury ? What are its economic effects ? How does it differ from harmful consumption ?
4. Explain by illustrations the economy of variety in consumption. Of harmonious consumption. Of inclusive consumption.

PART II.—PRODUCTION

CHAPTER I

INTRODUCTORY

Why Production should be studied Next.—We have made human wants, consumption, and demand the first subjects in our study of economic theory because it is from these that all other economic phenomena take their rise. We have seen why men exert themselves in the work of production. The next logical step is to inquire how men pursue the work of production. We have studied the cause and the laws of demand. We have next to make a similar inquiry on supply. Our present study therefore is the general subject of production.

What Production Is.—Just as consumption means the destruction, not of matter, but of the particular utilities of certain forms of matter, so *production means the creation, not of matter, but of utilities.* Man cannot create matter. Neither the farmer nor the merchant adds one atom to the existing material of the earth. Yet both are called producers, and are properly so called. What, then, do they produce? If you think about it you will discover that they are producing quantities of utilities and nothing else. And how do they do this? Simply

by putting things in places appropriate to that purpose. "This one operation," says John Stuart Mill, "of putting things into fit places for being acted upon by their own internal forces, and by those residing in other natural objects, is all that man does or can do with matter."

All Production essentially the Same.—It has seemed to some, even among economists of an earlier time, that the farmer is more truly a producer than the manufacturer, and the manufacturer than the merchant ; but careful thought discloses the fallacy of such a view. All industrial classes alike produce one or more of the four sorts of utility which we have described, and they do so by changing the relations of things in time or space. The farmer changes the position of grains of corn by dropping them into the earth. Then he removes weeds and throws soil about the rising stalks. Thus man's acts in changing the relations and position of things, aided by nature's materials and forces, result in more abundant corn for human consumption. The manufacturer in the same way changes the position of pieces of matter, and, aided by natural forces within and without the object of production, he causes matter to assume a form which fits it, or fits it better, for human needs. So, too, the merchant changes the places of things from where they are less useful to where they are more useful, or holds them in one place until a change of external circumstances gives them a greater time utility. He is producing utilities as truly as is the farmer or the manufacturer. Of course it is possible that the utilities actually produced by merchants could be produced with a smaller expenditure of economic force than is required at present, and that saving could

be effected by a better organisation of the work of production. Again, it may be that the merchant may now and then secure a larger return for the production of a given quantity of social utility than the farmer. But all this affords no justification for the popular impression that his work is really less productive in its nature than is that of any other industrial class. The only difference is in the kind of utility that the different classes are engaged in producing. Finally, it must be remembered that in the same way the physician, the teacher, and all others who are engaged in rendering personal services, are creating utilities, and are therefore producers.

Production, then, we may define as *the creation of utilities by the application of man's mental and physical powers to the physical universe, which furnishes materials and forces. This application of man's powers we call labour.*

We have already defined goods and economic goods. It remains here to call attention to the fact that those quantities of utility which result from labour are economic goods, but that economic goods are not all to the same extent the result of labour. A man may pick up a diamond or a nugget of gold upon which he has stumbled : in such a case it can hardly be said that the economic good is the result of labour at all. But even in such rare cases it must be remembered that while the one diamond or the one nugget may have required no labour to procure, yet the whole stock of such goods is the result of toil and suffering and privation for which the value of our diamonds and gold, it is frequently said, does not represent anything like a proper recompense.

There is one case of *value creation* clearly marked which is not *wealth production*. The land on which some parts of London and the city of Middlesbrough, for example, stand could have been purchased only a few centuries or years ago for a small sum of money. The great value which that land now has is to a considerable degree the result of human labour, but much of it is due to the large increase in population, which of itself represents no kind of labour. Such value is a product of social aggregation, not of individual effort. The question of the expediency of allowing individuals to appropriate these individually *unearned increments* of value will be discussed later. Here it concerns us only to notice that such unearned increments exist ; in other words, that there is such a thing in the world as value creation which is not at the same time wealth production.

Individual and Social Wealth.—This distinction between the individual and the social standpoint runs throughout Economics, and it is particularly important in the case of the conception of wealth or economic goods. What is wealth to the individual may not be wealth to society, and, on the other hand, what is wealth to society may not fall within the ownership of an individual. Thus a mortgage is wealth to the individual who holds it, but it is not a part of social wealth, for, if the claim for which it stands is extinguished, society is neither richer nor poorer. The case is the same with the bonds of a company or with Government stock.

Productive Elements often Overlooked.—There are many important facts regarding production which are often overlooked. Thus we are likely to forget that

even to-day a large part of production is household production, and is not designed for the market place at all. The labour of probably at least half the women of a nation is expended in producing material good things for the use of producers.

Again, we are likely to neglect the fact that in those rural districts, where a large part of the population of European countries and even of the United Kingdom still lives and works, there is annually produced a vast amount of goods which are destined not for the market but for home consumption. Vegetables, small fruits,—cultivated and wild,—butter, eggs, meat, fish, and game are some of the things that occur most readily to the mind.

Considerations of this character show the great need of caution in attempting to compare the annual production of one country with that of another, or to compare the annual production of the same country at different periods. Household production is becoming relatively less important, while the production of things for the market, the value of which is readily measured in money, is constantly gaining in importance. Hence, apparent annual production—the production of things which have a market price set upon them—is increasing more rapidly than is the real annual production. The result is a tendency to overestimate our progress and even to count as progress what may not be advance at all. Thus, should boarding-house and hotel life displace private housekeeping, annual production might appear to increase as a result of the change, though the real wealth and income of the country would evidently be affected in no corresponding measure.

Still further care must be exercised in studying

official or unofficial estimates of the wealth of a country. These estimates are ordinarily made in terms of money. Now if commodities are very abundant, relatively to money, their price, other things being equal, will be low, although the real wealth of the country is great. If, for instance, the quantity of cotton cloth produced doubles between two periods of calculation, while the price falls one-half, the total value of the product will appear in such estimates as equal in the two cases, though it is evident that society at the second period has twice the amount of this valuable commodity.

Over-production and Under-consumption.—It is not uncommon to find men expressing a belief in the possibility of general over-production. Still more common is it for men to hold views which could only be correct if general over-production were a possibility. Even some economists a century ago fell into such an error. *By general over-production is meant a production of commodities in general beyond the needs of society.* Careful thought will show at once the absurdity of the idea. The purpose of production, as we have seen, is consumption. Manifestly, there has never been a time when more economic goods were produced than men really needed to satisfy their legitimate wants. On the contrary, there has never been enough produced for this purpose. Sometimes, indeed, production moves forward unevenly, and undue amounts of labour and capital are for a time devoted to producing particular commodities; but until all men, women, and children are well fed, well clothed, and well housed, and furnished with material appliances for their higher life, such as books and pictures, it will be a manifest absurdity to talk about general over-production as a possibility.

When the difficulty in disposing of goods is almost universal, the chief cause is not over-production but under-consumption. Men want the goods, but they cannot at the time dispose of their services, and they consequently lack the purchasing power that would enable them to satisfy their wants. When any class of goods is produced in such quantities that the price falls below the cost, we may say that there is over-production of these goods. Such over-production is not uncommon. It is one of the unpleasant features of our complex organisation of economic society that its parts do not always work together harmoniously. Producers are more and more separated in time and space from those who consume their products. It follows that only the shrewdest producers can calculate with any approach to accuracy how intense will be the want for their particular goods, and in what quantities rival producers will furnish such goods in the market. Mistakes of judgment result in over-production in particular industries, and over-production in a few industries often leads to the spread of doubt and uncertainty throughout the business world. Then men in their fear restrict production and thus incidentally close the market for labour. Labourers seeking and failing to find regular employment lose their purchasing power, with the result that the under-consumption extends along the line, and society passes through what is called an industrial crisis or panic. Such crises occurred with startling regularity during the nineteenth century, the greater ones coming at intervals of about twenty years, with minor ones in the alternating ten-year intervals, and even now the alternate ebb and flow of trade, at one time dull and at another brisk, can be discerned, if

the period covered by the movement be less easy to discover or to fix.

The explanation of crises here given is the one largely accepted by economists, but there are two other explanations that should be mentioned. Some writers have regarded the unequal distribution of wealth as the fundamental cause. If wages do not rise in proportion to the general increase in wealth, it is argued, the mass of the consumers, who are wage-earners, will lack the means to purchase the goods produced. Again, other writers have noted the monetary aspects with the collapse of credit. A distinction has been drawn between commercial or industrial and financial or monetary crises.

Production and Sacrifice.—Consumption regularly affords satisfaction. Production as regularly requires sacrifice and exertion. We should recall here, what we have already noted in studying consumption, that the balancing of the satisfaction of wants derived from consumption against the exertion and sacrifice required by production is found at the very kernel or centre of all economic thought. It is true that much labour seems in itself so pleasurable that it affords its own satisfaction. But, if such labour is not sufficient to produce the goods that society demands, other labour which does not contain its own reward must be applied to production, and the same reward will be paid by society for all labour directed to that end. In most cases, however, it will be found on investigation, the pleasure comes rather from the actual or anticipated future result of the labour than from the labour itself. Again, when we consume to-day less than we have means to consume, with the object of greater production at a future time, we are aiding production by abstinence from a possible pleasure. True, in such cases we hope to get in the future a

satisfaction that will outweigh the present unsatisfied feeling, but the unsatisfied feeling is felt by us and must be endured if we are to contribute to production.

The Production of Goods and Services.—In what follows we shall treat the production of material goods and services together, as there is little essential difference between the two forms of production. It is worth noting, however, that the proportion of human effort devoted to the production of commodities and services respectively varies with the progress of civilisation. In early stages, when only the most pressing wants are either felt or satisfied, men perform for themselves such simple services as are required. It is only later that there arises a want for such personal services as call for special training. The social order gradually increases in complexity, and as a result of new wants and increased means of satisfying them, division of labour among men makes a place for the singer and the poet, the physician and the priest, and other classes who are engaged in producing personal services. As the production of material goods becomes better organised, requiring less proportionate human effort, greater numbers of people will find it profitable to specialise their training and effort in rendering personal service of one sort or another to society.

SUMMARY

1. Production means the creation, not of things, but of utilities, by the application of man's powers to the physical universe. This application of man's power is labour.
2. Individual wealth is not always social wealth.
3. Many productive elements, such as woman's work in the household, and the gathering of natural products for home use, are often overlooked.
4. There can be no general over-production. What is thought of when that expression is used should rather be called under-consumption.

5. With advancing civilisation, an increasing proportion of human energy is devoted to rendering specialised personal services.

QUESTIONS

1. Define production. Compare the definition of consumption with that of production.
2. Why and how is the physician a producer ? The teacher ? The actor ?
3. Mention instances of individual wealth. Of social wealth. Do all your examples belong to both classes ?
4. As cities increase in size, the value of land regularly increases. Is this value a result of production ? Explain.
5. What utilities are produced and consumed in your home which do not have a money value put upon them ?
6. Germany owns railways and England does not. How would this fact bear upon estimates of the wealth of the German people as compared with similar estimates of the wealth of the people of England ?
7. What is meant by the expression "over-production" ? Is such a thing possible ? What is it which is commonly mistaken for general over-production ?
8. Show by a detailed explanation how it is that more men are engaged in rendering personal services than was the case in earlier days.

CHAPTER II

THE FACTORS OR AGENTS OF PRODUCTION

The Three Factors.—Three things contribute to production as it is carried on to-day. They are therefore called the factors or agents of production. Of these, two are called *original* or *primary* factors, because they exist in the very earliest forms of production, and because it is from them that the third factor is derived. These two factors are land, or nature, and labour. Of these, in turn, we may notice that one is *passive*, while the other is *active*. In other words, it is primarily labour, acting upon nature, that produces wealth. From this action of labour upon nature, followed by postponement of the enjoyment of the result of the labour, comes capital, which we therefore call a *secondary* or *derived* factor. That is, it is secondary to nature and labour, and is derived from them.

NATURE OR LAND

Meaning of the Term.—Under the term “nature” we here include all the material things furnished directly by her hand, together with all the natural forces used in production,—the power of the wind, the movement

of water, gravitation, cohesion, etc. Some of these materials and forces are furnished in unlimited quantities, and are called "free" goods. It is common in Economics to use the word "land" instead of "nature," because of all the gifts of nature it is land with which we are chiefly concerned in our science. But it must be remembered that the word "land" in this use has the very broad meaning which we have here given to it. To avoid any possibility of confusion some economists have used the term "natural agents," when the broader meaning is intended.

What Land does for Production.—By analysis we learn that the service of land to production is not a single or a simple thing, but that it usually renders three distinct services. *In the first place*, (1) it furnishes *standing room*. It gives men something upon which they may rest and move about while conducting productive processes. Moreover, it enables them to utilise the natural forces which are linked with the land. Mere space is often a source of great value, and this we can see in the case of city real estate. As a continually increasing proportion of a growing population dwells in cities, this first service rendered by land is becoming more important. *In the second place*, (2) land contains those elements needed by plant life, and thus renders a service to agriculture. We call this property of the land its "fertility." *Finally*, (3) land contains natural products below its surface, such as coal, gas, petroleum, iron, silver, and gold. Man does not create these *natural treasures* nor give direction to nature in their formation.

Some nations have deemed it unfair that they should become the property of individuals, and have

therefore treated them as a common heritage, exacting a rent or royalty for the opportunity to exploit them. This is perhaps generally the case to-day on the continent of Europe ; but English law, with its inclination to the emphasis of private rights, has by contrast fostered the idea that he who owns the surface owns downward to the centre of the earth and upward to the sky.

The Law of Diminishing Returns from Natural Agents.—One of the most fundamental and far-reaching laws in Economics is that which describes the result of applying labour and capital to land or to other natural agents. This law, known as *the law of diminishing returns*, will repay careful thought and study.

Every farmer is naturally desirous of reaping the largest return possible from his expenditure of labour and capital upon his land. Yet this very statement implies that there is a limit beyond which further expenditure will be unprofitable. Let us see why this limit exists, and how it is determined. Suppose the case of an acre of land which a farmer intends to “ put under ” potatoes. The field would yield some crop even if it were ploughed hurriedly and poorly, if no fertiliser were used, and no care were taken to preserve the growing plants from destruction. Yet the farmer knows that further expenditure of labour and capital will result in a much larger crop, and that, if prices are good, the increased crop will fully repay the increased outlay. If we were to inquire more particularly from the farmer his opinion regarding the possibilities, we should get from him something like the following estimate :

An invest- ment of	would give a total return of	or an average per pound invested of
£2	40 bushels	20 bushels
£4	100 „	25 „
£6	162 „	27 „
£8	200 „	25 „
£10	230 „	23 „
£12	240 „	20 „
£14	252 „	18 „

and so on. Now an examination of these figures will show that a doubling of the expenditure from £2 to £4 results in more than a doubling of the product, and that similarly the increase in the product is more than proportionate to the increase in expenditure in the case following. So, too, there is an increase in the product in each of the other cases given ; but we should notice that when the expenditure is increased from £6 to £8, an increase of one-third, the increase in the product is only from 162 bushels to 200 bushels, an increase of little more than a fifth, and that in the same way in the following case, increasing the expenditure by one-fourth results in an increase of product of less than a sixth, and so on. In other words, up to a certain point an increase of expenditure results in a proportionate or more than proportionate increase in return, while, after that point has been reached, further increase in expenditure results in less than a proportionate increase in the return. If it were not for this fact, there would be no limit to the amount of labour and capital which the farmer could profitably employ in the cultivation of the acre of land. And the fact that farmers are everywhere limited in the amount of such profitable expenditure is complete proof that such a point of diminishing

returns exists in the application of labour and capital to natural agents.

It will appear on reflection that the farmer will not necessarily discontinue his expenditure upon the land at the point at which the product begins relatively to diminish. The limit of profitable expenditure will depend upon the price of the product, which of course cannot be exactly known at the time of planting. Thus at a price of less than a shilling a bushel, the farmer would lose absolutely in all except the second, third, fourth, and fifth cases in our illustration, and at 9d. a bushel he would make a surplus only in the third case. At a price of 8d. a bushel, he could not afford to raise the crop at all. On the other hand, at a price of five shillings a bushel, he could afford to expend £12 upon the acre, since the last £2 of expenditure would yield a return of ten bushels, worth £2 10s., or ten shillings more than the amount expended in labour and capital. At a still higher price he could afford possibly to expend more labour and capital on the cultivation, the amount depending upon the rapidity with which the proportionate return of the product decreased beyond the point covered by our illustration. We may, therefore, say that there are two ways in which returns diminish as expenditure increases : there is a diminishing return from the point of view of the product, and there is a diminishing return also from the point of view of the value of the product. The second is of course decisive with the farmer, *but this itself is due to the diminishing return measured in terms of the product.*

A further consideration remains to be noted. An imperfect understanding of the nature of the law has

led at times to the conclusion that as population increases it becomes increasingly harder to secure the means of subsistence from the soil. But this conclusion is at variance not only with the known facts of the history of society, but also with the law itself when that is properly stated. It would be a valid conclusion if the point of diminishing returns remained everywhere at the same position from year to year and from generation to generation. But we all know how far from the truth this last assumption is. The art of agriculture is constantly improving as a result of invention and the discovery of better methods and processes, and every improvement makes it possible to secure a greater crop without a greater expenditure ; in other words, *every such improvement pushes forward the point of diminishing returns*. The law of diminishing returns still holds true. There is still a point beyond which further investment of labour and capital upon an acre of land will yield a less than proportionate return, but that point is not now reached as soon as before.

We are ready for a formal statement of the law we have been discussing. *At any given time, there is a point in the application of labour and capital to natural agents beyond which further investment yields a less than proportionate return.*

We have taken for our illustration the case of labour and capital expended in agriculture. But the law is equally true of the expenditure of labour and capital upon land or other natural agents in the case of mining, manufacturing, and commerce. The only difference is that in these industries greater amounts of labour and capital may be expended upon a given unit of land,—

say an acre,—before the point of diminishing returns is reached, than is the case in agriculture.

It is possible to look upon the law of diminishing returns from other points of view than that adopted here. For example, instead of taking an acre of land as a unit and supposing successive amounts of labour and capital to be applied to it, we might have considered the farmer himself as the unit, giving him successive amounts of land, labour, and capital to manage. In this case we should also have found at first an increasing and then a diminishing return. As still other points of view are possible, it is important to adhere to one standpoint in comparing different lines of industry.

LABOUR

Definition.—The second of the primary or original factors or agents of production is labour. *Labour is human exertion of mind or body undergone with the object of creating utilities.*

A common classification distinguishes mental from physical labour. In making this distinction it is important to bear in mind that from the purest instance of mental labour to the purest instance of physical labour there is always some mixture or combination of both forms. The philosopher must labour with hand or tongue if he would give the results of his thought to the world, and, on the other hand, even the digger of a ditch cannot do his work without the exercise of intelligence.

We must never forget that labour is not an end in itself, but only a means to an end, the satisfaction of wants. With this thought firmly borne in mind, it will not be difficult to understand that increase of labour, unless it means increase of human satisfactions, is not

socially desirable. Breaking window panes makes a chance for labour, but it does not increase human satisfactions as a result of that labour. On the other hand, labour-saving devices, while they may injure individual labourers, are beneficial to society as a whole, because they enable it to secure greater satisfactions by the same exertion.

The Supply of Labour.—A question of prime importance in connection with labour is that of the conditions affecting its supply. What is the supply of labour? Evidently it is not mere numbers, for a hundred labourers in one country often furnish much more labour to production than do a hundred labourers in another. Analysis of the subject shows that the two main elements determining supply are (I) *efficiency* and (II) *quantity*. The efficiency of labour depends in its turn first upon (1) *the efficiency of the labourers themselves*—upon their characteristics, mental, physical, and moral. Temperance, trustworthiness, skill, alertness, quick perception, comprehensive mental grasp;—all these good qualities minister to the efficiency of labourers, and hence of labour. In the formation of these qualities the physical and social environment in which the labourers are reared and do their work are of the greatest importance.

(2) The second influence determining the efficiency of labour is *the manner in which it is organised and directed*. As we are to discuss this separately at some length, we may note here the fact alone that when labour is carefully organised and directed, so that each labourer can do continuously the work for which he is best fitted, the labour by that means becomes indefinitely more efficient.

(II) The second element in the supply of labour is its amount or quantity. This again depends partly (1) upon the *aggregate number of hours* during which labourers work, varying with the length of the working day, the number of holidays in the year, etc. A ten-hour working day means a greater quantity of labour than an eight-hour day, and therefore a greater supply of labour, provided only that efficiency is not proportionately impaired by the long hours of work.

The Growth of Population.—The supply of labour undoubtedly increases, other things being equal, (2) with *the growth of population*, for that means a possible increase in the number of labourers. Now, to the growth of population there is no absolute limit save that presented by the means of subsistence which can be secured. Throughout recorded history we find again and again the population of one country and another increasing to the starvation point ; *i.e.* increasing until the means of subsistence are less than sufficient for all who have been born. From this fact has arisen a fear that such over-population will continually recur in the future as it has done in the past. Those moved by this grave fear have often on their lips the theory of an English economist, Malthus, called from his name, Malthusianism. According to him, population, when it is not checked, *tends* to increase in geometrical progression, while the best that we can hope in the case of food is that it may increase in arithmetical progression. Consequently, if there were no other checks upon the increase of population, men would soon reach the point of starvation. It is admitted by the theory that such checks exist. These are of two kinds, *positive* and *preventive*. Positive

checks are those which act through the death of the living—checks which increase the death-rate, such as plagues, pestilence, intemperance, infanticide, cannibalism, and war. Preventive checks are those which act through a lowering of the birth-rate. These are in the main checks of a moral character, including what Malthus called *prudential restraint*,—consisting in the postponement or avoidance of marriage, or of the upbringing of a family. Conscientious men will be slow to marry unless they can support a wife and rear their children worthily. As population becomes more dense, they, finding the burden of rearing a family more heavy, postpone marriage or they avoid it altogether. With every increase of the average age at marriage, the number of children born decreases more than in the same proportion. Innumerable customs exist in different parts of the world which have sprung from the social need of checking marriage and population. For instance, the rule obtains in some peasant communities of marrying only when a cottage becomes vacant through the death of its former occupant. Malthus himself formally deduced this single lesson : let no man marry until he has a reasonable prospect that he will be able to support a family of the average size. He wished to intensify in Englishmen the feeling of parental responsibility. But Malthus himself often forgot the hope offered by man's gradual enlightenment, and formed a gloomy view of the future. Others, following Malthus in his gloomy reasoning, have thought that there is no escape for the race from repeated overpopulation with all its resulting vice and misery. Modern civilisation, however, gives cause for the belief that as prosperity is more widely spread among people,

the problem of over-population will lose its serious aspect. Statistics show conclusively that everywhere advancing civilisation has been accompanied by a decline in the birth-rate. At the present time, nothing further in the way of restraint of population seems necessary in England and other countries than the observance in contracting marriage of that prudence which has long characterised the best classes of English society.

Population and the Standard of Living.—In another place we shall study at some length the influence exerted upon population by the *standard of living*,—the amount of necessities, comforts, and conveniences which people are accustomed to enjoy. Here we may just pause to note that where the standard of living is high and is firmly maintained, anything that threatens it will set in operation the preventive checks to which we have referred. But the standard of living is not absolutely fixed, and changes in population through the action of preventive checks come about but slowly. It may therefore happen that when the standard is assailed by continued national adversity, the rising generation may be brought up to accept a lower standard, according to which a greater increase of population will be possible and natural.

The Two Sources of Increased Population.—The population of any country, as distinguished from the whole world, has two sources of growth,—*natural increase* and *immigration*. Natural increase is caused in any country through a *continued excess of births over deaths*; in other words, through a birth-rate which on the average exceeds the death-rate. Such an excess, however, may result from any one of several differing

conditions. Thus some countries, *e.g.* Russia, have a very high death-rate with a still higher birth-rate, while in other countries, *e.g.* England, the increase results from an excess of a low birth-rate over a still lower death-rate. It is evident that the proportion of persons capable of labour, *i.e.* the supply of labour, will be larger where the death-rate is low. Manifestly, too, it makes a great difference to the real happiness of a country whether the increase in population is due to the one condition or the other. In the United States population has increased with wonderful rapidity for more than a century both through immigration and through natural growth. Immigration on a vast scale has continued to the present day, when it is greater than it was before ; and, though the birth-rate has been gradually declining, the death-rate has fallen almost as steadily, with the result that natural increase of the population is uninterrupted.

CAPITAL

Definition.—The third factor or agent in production, the secondary or derived one, is capital. Much as hydrogen and oxygen produce water, land and labour produce capital. While it is itself neither land nor labour, capital, derived as it is from both, is a new thing with properties of its own. In everyday speech the word “capital” is often loosely used to describe things which are technically not capital at all. Thus the word is often used to include land, because, in many respects, to the man engaged in a business enterprise there is little difference between his land and his machinery. Yet technically the two should be sharply

distinguished. Again, business ability is often described as personal capital, and there is a certain sense in which this figurative expression has a value ; but it should always be remembered that such language is only figurative. Land is nature ; capital is a human product. Labour is indissolubly connected with the personality of the labourer ; capital is a material thing resulting from that labour. Capital as a factor of production, then, may be defined as consisting of *those intermediate products which are used for the purpose of further production.*

The Function of Capital.—Capital is “the medium through which the two original productive powers exert their instrumentality.” It includes not only all the aids to production made by man, such as buildings, machinery, and tools, but also all those unfinished goods, such as hides and bar iron, which enter into further production. These partly manufactured materials are technically described as being in the “process of ripening.” They are to be distinguished from goods which have passed through the final stage of production, and are in the hands of consumers. Such goods are no longer capital, although from their wise use new capital may result.

The function of capital may be expressed as follows : *It enables men to utilise more completely nature’s materials and forces by the substitution of roundabout methods of production for direct methods ; and it accomplishes this result by furnishing the tools for such roundabout methods, and by making possible a longer interval between the initial effort and the final effect, or consumption. Roundabout methods are almost without exception more efficient than direct methods, but these methods require tools*

or machinery and a lengthened period of production. Thus, a man may lift a heavier weight by the roundabout method of using a lever, instead of relying upon his unaided strength, because in this way he summons nature's forces to his aid. And every improvement in machinery means a more roundabout method of applying labour. Capitalistic production, therefore, as it develops, shows a continual increase in the number of steps between the initial movement and the final product, and, as a general rule, an increase in the length of the interval.¹

The Origin of Capital.—It is often said that capital is the result of saving, but such a statement of the case is at least misleading. Saving, as such, is merely a negative act and cannot produce a positive result. In order that we may save, we must first have something to save, —that is, we must produce,—and, moreover, we must produce something more than is sufficient for existence ; in other words, we must have a surplus. If such a produced surplus is laid by or saved, it *may become* capital.

Methods of Capital Formation.—Such savings do become capital when they are devoted, directly or indirectly, to furthering production. One of the simplest

¹ The teacher must remember that it is impossible in an elementary treatise to enter into detailed explanations and qualifications of every statement and principle. The authors leave a large latitude to him in this direction. Improvements sometimes seem, to shorten processes, but, when we go far enough back in our studies, we shall find that the rule given above is correct as a general principle and calls attention to one of the most remarkable and significant principles of capitalistic production. A threshing machine threshes grain rapidly, but, to apply the above principle aright, we have to think of all the steps involved in the production of the machine and the length of the process. The roundabout methods, of course, are not an end but a means to an end.

ways in which a saved surplus may be transformed into capital would be illustrated by the case of a fisherman who should use part of the catch of one period to support life while in a later period he worked at a canoe, or net, or other device for increasing the product of his future labour. In advanced communities the process is usually much more complex. The farmer, for instance, who wishes for a self-binder, pays for it directly with his money. But the money has been received in return for a saved surplus of his farm products. Meanwhile, those who have been working on the manifold processes which result in the finished farm machine, have been supported from a surplus which has been advanced to them. The case is the same with the manufacturer. He may sell his products and consume at once the resulting means of livelihood, or he may consume less than all of those, and with the remainder purchase from others the forms of capital of which he stands in need. Or, having all the machinery needed, he may invest his surplus in the stock of some company, and in this case the company will use it for the purchase of needed capital. In all of these instances the use of money obscures the nature of the transaction, and it is at bottom only the turning of labour from the production of finished consumption goods to the production of capital goods.

Results of the Use of Capital.—It remains to say a few words regarding the results of the use of capital. First of all, (1) capital renders possible an increased amount of product. Things that could be produced by hand and without capital can be produced in much greater quantities when capital is present. In the second place, (2) capital brings within our reach utilities

which we could not enjoy at all without it. Thus, the enjoyment of oysters and shell-fish at great distances from the coast would be impossible without the capital engaged in transportation. Finally, (3) capital makes feasible in many cases a higher quality of product than could exist in its absence.

Representative Goods.—One class of goods, if they may be so called, must be especially distinguished from capital in the technical sense of the word. We refer to what are known as “representative” goods, which are not, strictly speaking, goods at all, but only signs of the ownership of goods. Notes, mortgages, bonds, and stock certificates are not goods ; they simply represent ownership.

Fixed and Circulating Capital.—It has been common among economists to classify capital as *fixed* and *circulating*. Circulating capital is *that which can be used but once, or in one round of operations*. Its entire value passes over into the value of the finished product. Fixed capital, on the other hand, is capital which *lasts through a succession of operations, only a part of its value passing over with each use into the product*. Thus, the raw materials and the partly finished goods used in manufacturing are examples of circulating capital, while the factory building and the machinery are fixed capital.

Free and Specialised Capital.—A somewhat similar classification is that of *free* and *specialised* capital. Even more than is commonly the case with such classifications, these words must be understood as pointing alone to relative ideas. Specialised capital is *that which by its form or circumstances can be used for only one productive process, or at most for a very limited number of*

such processes. Free capital, on the other hand, is capital which *can be applied to any one of a considerable number of productive operations.* Thus coal, iron, and leather are relatively free forms of capital, while railways, canals, and many forms of machinery are relatively specialised. The practical importance of the difference lies in the fact that free forms of capital can more readily adjust themselves to changes in the social demand for goods. Thus, if too great an amount of a nation's capital is converted into fixed and specialised forms,—into railways, for example,—the mistake is not corrected easily or quickly, and the entire production of the country must suffer in consequence of bad adjustment. Such disproportionate investment of capital in fixed and specialised forms is believed by many economists to be the most important single cause of industrial crises.

SUMMARY

1. Of the three factors or agents of production, land and labour are primary and original, while capital is secondary and derived.
2. Land furnishes "standing room," fertility, and natural treasures.
3. Labour means human exertion of mind or body undergone with the object of creating utilities.
4. The efficiency of labour depends upon the efficiency of the individual labourers, and upon the efficiency of their organisation.
5. Capital consists of intermediate products used for further production.
6. The formation of capital involves saving or "abstinence or postponement of enjoyment."

QUESTIONS

1. **Mention some of the checks upon population. How does the standard of life affect the increase of population ?**
2. **Why should land be distinguished from capital ? To which class do the buildings upon land belong ? The fertiliser that was used five years ago ?**
3. **What advantages flow from roundabout processes of production ? Mention some of the steps in the development of indirect processes in the production of wheat.**
4. **Distinguish between free and specialised capital ; between fixed and circulating capital. What are representative goods ?**

CHAPTER III

THE ORGANISATION OF PRODUCTION

IN the preceding chapter we have considered the factors or agents of production separately, studying the nature of each, and the principles governing its efficiency and its increase. We have now to study the manifold ways in which production in our day has become "socialised" and organised. It is as though we had observed the nature of the various parts of a machine, and were then to proceed to note the different ways and methods of putting the parts together, and to learn how these acted as a unit when the whole machine was "set up."

I. ORGANISATION OF THE FACTORS OR AGENTS REGARDED COLLECTIVELY

Early Simplicity.—We have already seen that the three main parts of the great machine of production are land, labour, and capital ; and we may therefore first of all inquire how these parts are "assembled" for efficient work. In other words, the first problem in our present study is that of the co-operation or organisation of the factors or agents of production taken together or collectively. This organisation, in the early stages of social development, was exceedingly simple. The old

household economy was so organised that it is scarcely possible to distinguish in it the three separate factors. The same man owned the land, the labour, and the capital, and as sole judge of what was right distributed the total product among those who aided in production. When, with advancing civilisation, production was carried on by village communities, we find collective ownership of the instruments of production and management by a common authority, and the distribution of the product was regulated by custom. Later, under the gild organisation of industry and commerce, there was a similar lack of sharp separation of the factors. The gild of the Middle Ages embraced apprentice, journeyman, and master, and regulated industry and commerce under governmental supervision. The master directed the business, owned the capital, and worked with his own hands. He received the entire product of the undertaking after supporting the apprentice and paying the journeyman. Labour was in a certain measure parted from the other factors, but the separation was by no means complete. The man who at any time supplied labour looked forward with reason to the hour when he himself in turn should become capitalist, employer, and manager, for such advance was a regular part of the gild system.

Growth of Complexity.—As has been explained in earlier chapters, the last one hundred and fifty years or so have witnessed a great change in the organisation of the productive factors. Here and there still survive traces of the earlier simplicity, and one great branch of production, agriculture, is still generally carried on in many European countries without a separation of the agents. In England the system of landlord, tenant, and

labourer prevails, but on the Continent a large proportion of the peasants own the land they cultivate and some at least of the capital they employ, and they depend entirely or largely upon their own labour and that of their families for what they produce. The English landlord lets the land and its equipment of farm buildings and permanent improvements to a tenant who provides the working capital and directs hired labourers. By contrast, in commerce, manufacturing, and transportation, both here and on the Continent, we have as a general rule to-day one large class furnishing labour only, another class supplying capital and sometimes land, and a third class organising and managing business. A modern railway undertaking serves as an illustration. The holders of the bonds or shares furnish the capital, and receive in return interest or dividends, fixed or varying. Labour, supplied by others, is paid either by wages or by salaries. The land is also regularly supplied by the bondholders or the shareholders, as it has been acquired by the exchange of a part of their capital. Consequently, we have in reality rent also, although it may not always appear as a separate item of railway bookkeeping, except in those few cases where the land is leased instead of being purchased outright. Finally, the managers and directors of the business, chosen by the stockholders from their own number or from without, constitute a separate class in the organisation. Yet in this example there is no such strict separation between different persons fulfilling different functions as economists are wont to make.

The Entrepreneur.—It is easy, however, to see that when business organisation has grown so complex,

some central guiding intelligence is necessary, which will survey the whole field, and, after deciding what things shall be produced, and in what quantities, will provide that the necessary factors of production work together in creating the product. The man who does this usually assumes the risk of loss or failure, and, on the other hand, he pays a stipulated sum to those persons or classes who supply him with the factors of production.

In the England of the eighteenth century such a man was called an "undertaker" or "adventurer." As the word "undertaker" has come since to be applied to one small and special class of business men, and as the word "adventurer" now carries with it an idea of rashness or even of dishonesty, the French word "entrepreneur," an exact equivalent of the word "undertaker," is now regularly used instead.

The function of the entrepreneur has become of the utmost importance in modern society, and seems to be growing in importance with every increase in the complexity of industrial organisation. He has been well called the "Captain of Industry," for it is he who marshals and commands the industrial forces, and more than any one else bears the responsibility for failure or success. Business enterprises under able leaders achieve brilliant successes only to languish and become bankrupt when death removes the guiding hand and brain. Such has been the case with many great mercantile and manufacturing undertakings built up in London and other cities. Whole towns in many cases depend for their prosperity upon a few shrewd Captains of Industry.

The Forms of Business Undertaking.—The management of a business is not always undertaken by a single

individual. On the contrary, an increasing volume of business is tending rapidly to be conducted in forms which call for a division of the function or functions of the entrepreneur between many individuals. The following are among the main varieties of business undertaking in the modern world :

1. *The Single Entrepreneur System*.—In this kind of business, a single individual owns or hires the capital and land, employs the labour, directs the business, and bears the whole risk.

2. *Partnership*.—In the case of a partnership, the ownership, direction, and responsibility are shared, sometimes in unequal proportions, by the two or more partners, who are severally liable at law to the full extent of their fortunes.

3. *Business Companies*.—This type differs from the foregoing chiefly in the fact that the individual responsibility of the members of the body is limited by the agreement or the statutes governing such companies, and in the further fact that there is no necessary legal limit to the life of such corporations. On account of the magnitude of business transacted under this form, it often happens that the functions of entrepreneurship are divided, the shareholders owning, controlling, and bearing the risk, but committing the active management to elected directors, and, through the directors, to hired superintendents and managers.

4. *Co-operative Businesses*.—In what has been called by economists “co-operative production,” but is now often described as “labour copartnership,” the workmen combine, in the shape of a partnership or corporation, in the ownership or control of the other factors of production, share all risks, and secure direction of the

business either through their own members, chosen for the task, or sometimes through regular salaried managers. The great weakness of the system has thus far been that the co-operating workmen have too frequently underestimated the importance of efficient direction and of the observance of disciplined obedience to its orders. A variety of such a system is discovered in schemes of "profit-sharing" under which one or more entrepreneurs give their wage-labourers a portion of the profits earned.

5. *Government Enterprise.*—The central and local governments severally own and manage some businesses of great importance. In these instances the people as a whole possess the business and bear all risks, while they commit the direction to elected or appointed managers.

II. THE ORGANISATION OF THE FACTOR LABOUR

In studying the forms of business undertaking, we have really been studying the different ways in which society secures co-operation and organisation of the factors of production as a whole. We have now to note the manner in which the factors, considered separately, are organised to secure increased efficiency. And first let us consider labour.

If it were possible to conceive of a people among whom every individual produced for himself all that he used, exchanging products with no one else, we should have an example of *isolated* or *unorganised* labour and unorganised production. But there is no evidence that such an extreme state of things ever obtained anywhere. Wherever we find men gathered

together, we find some *socialisation*, some organisation of their efforts to secure a living, some organisation of labour.

Forms of Organisation.—1. *Simple Associated Effort.* One of the earliest forms of organisation to be developed among men, which still plays a considerable part in the economy of the world, is that which has been named *simple associated effort*. When a group of men unite their efforts in raising a heavy weight, or two men beat together a heated iron or work a saw, we have this simple form of organisation. Sometimes, as in the first of these cases, the combination is designed to effect a result which could not be accomplished at all by the single individual. Always the combination results in a greater achievement than would issue from the sum of the efforts of the several individuals.

2. *Division of Occupations.*—With advancing civilisation, industry as a whole has more and more been broken up into parts, and the parts have, therefore, constantly been growing smaller. One of the earliest steps in the organisation of labour, perhaps even earlier than that which we have described above, was taken when the members of primitive society began to specialise in their work. And the whole story of society since, not only on its economic side, but in all its other phases as well, has been a lengthening tale of increasing specialisation of work or function. With division and subdivision constantly taking place, it is clearly impossible to distinguish or name all of the stages of progress. But two of these are recognised in popular speech as possessing a distinct character. The first is what we may call *division of occupations*. Probably the most primitive form of such division

was that by which in savage life the men took for themselves the functions of warriors and hunters, putting upon the women the tasks of the household and the field. Division of occupations is indicated by the names of the manifold trades or callings.

3. *Division of Labour*.—The further subdivision of existing occupations has been the work of the last few centuries, and especially of the eighteenth and the nineteenth. To this further subdivision—this further organisation of labour—has been given the technical name *division of labour*, although, as we have seen, division of occupations is but an earlier division of labour on larger lines. This form of organisation is of such prime importance in modern industry that it calls for detailed careful study.

In our discussion of labour as a factor of production, it was pointed out that the efficiency of labour is in great measure determined by the efficiency of its organisation. Such efficiency of organisation is secured in the highest degree through division of labour. Division of labour—as well as division of occupations—might perhaps with equal propriety be called co-operation of labour. Productive processes, especially in manufacturing, are to-day divided into minute sections, one part or perhaps two or three very small parts being given to each labourer, or to each group of labourers. Thus, in a modern watch factory, one workman makes one small part of a watch, another a second, and so on. So many are the divisions of the process of watchmaking that no fewer than 300 workmen are required to organise efficiently such an establishment. In the same way, instead of one man performing all the operations in the making of a boot, as was once the

rule, we have to-day a front cutter, back cutter, back-stay cutter, top cutter, facing cutter, lining cutter, sorter and buncher, size and case marker, stay skiver, top skiver, crimper, front trimmer, top-front stitcher, top-back stitcher, and so on to as many as 113. But while the workmen divide the processes among themselves, they unite in producing the completed article, and hence we may say that division of labour implies co-operation of labour. When we use the phrase "division of labour," we are looking at one side of the process ; while, when we speak of co-operation of labour, we are viewing it from another side. And the same is true of division of occupations.

Division of Labour Illustrated.—A good illustration of division of labour is afforded by the needle-making industry as it is generally conducted to-day. Steel wire, which is itself the product of highly divided labour, is the raw material of the needle factory. All needles pass through the same general list of processes. These, as the visitor to the factory may view them, are in outline as follows : The wire is first put through a machine called the straightener and cutter, which removes all bends in the wire and cuts it into pieces about one-third the length of the finished needle. These short pieces, called *blanks*, are placed in small iron cylinders, which are rotated in such a manner as to keep the wire in constant motion under friction. They are thus freed from scale and dirt, and are ready for "cold swaging." For cold swaging, the blanks are put into a hopper, from which they are taken by machinery, one at a time, and held so that one end is presented to the action of a set of revolving sectional steel dies. By the constant opening and shutting of these rotating dies, the end is compressed and drawn out to form the needle "blade." After the swaging is finished, another bit of machinery is made to stamp upon the flattened surface of the needle a

number or mark, which indicates what sort of needle it is finally to be. Inequalities are next remedied by trimming all blanks to a uniform length. When the blanks have been trimmed and stamped, they are taken to a grooving machine, by which a short groove on one side of the needle and a long groove on the other side are made simultaneously. The needle is now ready for its eye. Women are usually employed in this process, which calls for a high degree of manual dexterity and keen sight in controlling the blanks as they are "fed" through the machine. One girl with modern machinery can punch about seven thousand needle-eyes a day, or more than a dozen a minute. The needles are next given their points by machines, which differ according to the kind of point, as "round," "twist," "diamond," etc. So far as shape is concerned the needles are now complete; but the softness of the steel up to this point makes them useless for practical purposes. They must therefore be hardened and tempered, and this in turn needs several processes and gives opportunities for divided labour. Next they are sharpened and polished by a piece of machinery which holds nearly a hundred of them at once against a brass wire scratch-brush revolving 8000 times a minute, and afterward against a bristle brush. The eyes of the needles are then smoothed by stringing the needles on a cotton thread, covered with oil and emery, which is drawn backward and forward at angles to the needles, so that the polishing powder acts on all parts of the aperture. Next follow finish-pointing, done on a fine emery, and finish-polishing, done by a revolving brush with crocus and alcohol. Counting and packing offer still further opportunities for divided labour, by which the utmost economy of energy is achieved.

The Advantages of Division of Labour.—It has been usual for economists to enumerate the advantages of the division of labour as follows: First of all, it secures (1) a gain or *saving in time*. This gain in time is two-fold. (a) The workman does not have to pass so

frequently from one operation to another, and (b) he can learn his special process in less time. In the second place, division of labour secures (2) *a gain in skill*. In the third place, the system results in a (3) *gain in adaptation, by finding a place for every one and putting every one in his place*. The man who is physically or mentally strong can devote his whole time to work that is worthy of him, while the man who is weak in muscle or in mind can find work in which great powers would partly be wasted. In the fourth place, division of labour secures (4) *a gain by paving the way for invention*. The processes being rendered simple, the individual workman can render himself more familiar with them, and can therefore see where and how improvements can best be made. It has therefore happened that a large proportion of modern inventions have come from the brains of the workmen. Finally, division of labour secures (5) *a gain through a more complete utilisation of capital*. Each workman using one tool or one set of tools, or operating one machine, keeps the capital employed all the time.

Disadvantages of Division of Labour.—But division of labour has also its dark side. First of all, the system, by making possible and profitable the employment of women and children, (1) *often deprives men of their employment*. In some places even we may sometimes find fathers at home “keeping house,” while their wives and children are working long hours in factories. In the second place, division of labour (2) *gives rise to a dependence of man upon man* that is often, at least in part, an evil. Thus a strike by a particular group of men in one business—mining, for instance—may throw out of employment not only the remaining men in that

business, but also thousands or tens of thousands of others whose own work depends upon the product of the industry in which the strike occurs. The same sort of hardship results from division of labour when workmen too old to acquire a new trade are deprived of their usual employment by a change in the conditions or methods of production. These evils, to be sure, right themselves in the long run ; but, as an observer has remarked acutely, the "long run" is too long for the ordinary man, whose life is but a short run. A third evil connected with the system of divided labour is, that by it (3) *labour often loses its attractiveness and, at the same time, its educational value.* A workman who makes a whole watch can acquire such love for his work that he becomes an artist ; but who can learn to love the mere routine of putting metal disks under the face of a die for ten hours a day ? "It is," as a writer has well said, "a sad thing for a man to have to testify that he has never made more than the eighteenth part of a pin."

III. THE ORGANISATION OF THE FACTOR CAPITAL

In the foregoing discussion of the organisation of labour, it will perhaps have been noticed that the organisation of labour is intimately associated with the organisation of capital. That division of labour would never have developed without that organisation of capital in the form of machinery which is characteristic of modern industry, is well illustrated in the description of divided labour in the needle industry. We need not concern ourselves further, therefore, with a separate consideration of the organisation of capital.

IV. THE ORGANISATION OF THE FACTOR LAND

Territorial Division of Labour.—To a certain extent the same is the case with the organisation of natural agents as with the organisation of capital. Labour is human effort applied to natural agents, usually aided by capital. Organisation of labour, therefore, generally involves at the same time organisation in the use of natural agents and capital. But there is one form of organisation of production that is so generally conditioned by the factor, nature, that we may well treat it as a form of organisation of the natural agents themselves. The two names most commonly applied to this form of organisation are *localisation of industries* and *territorial division of labour*. As with the division of labour, so with localisation of industries, the tendency is toward increasing specialisation of function, in the one case among persons, in the other among places. Thus the territorial specialisation by which country districts supply the towns with food, receiving manufactured goods in exchange,—society thus dividing its labour into country work and city work,—resembles the primitive divisions of occupations, among savages, into man's work and woman's work. And the finer territorial specialisation by which certain agricultural regions produce almost exclusively some one product or some few special products, while certain manufacturing centres similarly devote themselves to making some one commodity or some few commodities, may, in the same way, be likened to that form of division of labour which we have described at length.

Many interesting illustrations of territorial division of labour or localisation of industry could be given.

The cotton industries of Lancashire, the woollen and worsted trade of the West Riding of Yorkshire, are well-known examples. The production of beer at Burton, that of boots and shoes at Northampton, and that of lace at Nottingham, are similar instances. Worcester is famous for its gloves, Kidderminster for its carpets, Witney for its blankets, and so on.

Of the causes which lead to such localisation of industry, the following are among the most important : proximity to materials, nearness to markets, water-power, favouring climate, local supply of the kind of labour needed, local supply of capital for investment, the momentum given by an early start. Inasmuch as most of these causes are connected with geographical considerations, rather than with labour, it will be understood why we have treated localisation of industries as a form of organisation of natural agents, rather than as a phase of the organisation of labour.

Just as advancing civilisation brings increased specialisation or division of labour, so we may expect that the future will witness an ever growing specialisation of industry on geographical lines. Increasing stability of governments, improved methods of rapid transit, the breakdown of inter-racial antipathies and prejudices, are making world markets possible, and with the world markets will come a condition of affairs in which every country and every section of every country will confidently produce to the utmost those goods in the production of which it enjoys the greatest relative advantage.

V. CONDITIONS DETERMINING THE ORGANISATION OF PRODUCTION

We have already noted in passing one or two of the conditions upon which depends the efficiency of organisation of production. It may be well to bring them together at this point and to speak at the same time of an even more important factor which influences all production, no matter how it be organised.

1. *Extent and Character of the Population.*—Perhaps first in logical importance are the size and character of the population. The more numerous the consumers, the greater must be the supply of goods ; and, the greater the supply of goods, as a general rule, the more minute will be the organisation which will be found economically profitable. This idea is often expressed in the statement that *division of labour is determined by the extent of the market.*

2. *Growth of Capital.*—The second great condition of the organisation of industry is the growth of capital, whether in the form of machinery or in the form of means of transportation and communication and exchange. Improvements in machinery have made increased specialisation and organisation technically possible, while railways, telegraph and cable lines, and banks have widened the markets and have thus rendered such organisation economically possible, that is, profitable. *

3. *The Character of the Industry.*—All industries do not lend themselves equally to some of the kinds of organisation that we have described, no matter what the population be or the extent of capitalisation. Agriculture has hitherto in the main defied all attempts at minute

division of labour. Manufacturing lends itself to division of labour in the highest degree. Without entering into a discussion of all the technical reasons for this difference, we may say that the main requirement, within the industry itself, for minute organisation is that the different processes shall permit of being carried on simultaneously. We know well that this feature of industry is characteristic of manufacturing, and that, on the contrary, it is almost entirely lacking in the case of farming.

4. *The Character of the Government.*—A fourth condition of efficiency of organisation is the character of the government. Even the most advanced States differ in many ways in structure and in the legal restrictions which they enforce, but all civilised States secure at least the following conditions of efficient organisation : they all (1) maintain the institution of private property ; (2) protect life and property from enemies without and within the nation's borders ; (3) create and preserve the institution of contract ; and (4) participate directly in industry in cases in which it has been clearly proved that individuals will not act at all or will not act for the best interests of industry as a whole. Thus, all civilised governments have coinage systems, regulate weights and measures, establish and care for docks, lighthouses, and roads, and maintain a consular service in foreign lands.

VI. LARGE SCALE AND SMALL SCALE PRODUCTION COMPARED

Modern times have witnessed a very rapid growth in the average size of the individual business. In-

deed, the change in magnitude of the business unit during the past half-century is almost as striking as the transformation from domestic to factory industry which occurred in the second half of the eighteenth century. The movement has gone so far and is still proceeding with such speed as to excite a very general fear about its social consequences. Certain dangers resulting from the consolidation of large competing undertakings in Trusts and similar kinds of combinations will be discussed elsewhere ; but it is pertinent at this point, in connection with the subject of the organisation of production, to advert briefly to the advantages claimed for large scale production and to the compensating advantages enjoyed by small scale producers.

Advantages of Large Scale Production.—The advantages claimed for production on a large scale resolve themselves into two general classes : (1) *economies in making the goods*, and (2) *economies in marketing the goods*. With reference to the first, it is claimed that in production on a large scale there is a saving in (a) *capital cost*, per unit of product, both *in fixed and in circulating capital* ; in (b) *labour cost*, owing to the benefit of more efficient organisation ; in (c) *the possibility of making improvements*, both through the employment of special investigators and inventors, and through the comparison of methods in different departments of the same factory or in the same departments of different factories under one ownership ; in (d) *the cost of superintendence* ; in (e) *the utilisation of waste*, as instanced by the Standard Oil Company and the great beef and pork packing companies of America and some large enterprises in this country ; in (f) *providing the*

necessary supplements to making and to marketing—cans, boxes, etc., for packing goods, and railways and steamship lines, etc., for their carriage. In businesses enjoying this last advantage, we have examples of integration of industry as well as of concentration of industry.

Among the second class of advantages claimed for large scale production, economies in marketing the goods, are the following : (a) *economy in securing trade*, through advertising and commercial travellers ; (b) *economy in “carrying” stocks of goods*, a relatively smaller stock being sufficient to meet the fluctuations in demand ; (c) *economy in conveying goods to consumers*, through the power of obtaining better rates for large shipments ; (d) *economy in securing a foreign market*, through the greater ability of the big concern to withstand the cut-throat competition common in “hard times.”

The Strong Points of Small Scale Production.—Against these alleged advantages of large scale production may be set the following considerations which seem to promise a continuation of a considerable measure of small scale production, at least in certain lines of industry : (a) First of all, it is claimed by experts that in many lines of business *a plant of moderate size is the plant of really maximum efficiency* in regard to capital and labour costs. (b) In many cases the advantage of the large scale business in the matter of concentration of power is neutralised by the fact that *modern invention*, especially in connection with electricity, is *revolutionising the methods of distributing power*, and putting the small manufacturer on a level with his greater rival. (c) It is, furthermore,

very doubtful whether large scale producers can secure that *minute and economical supervision* which characterises small scale industry ; whether, in other words, hired managers can compete in this respect with individual entrepreneurs who will reap all gains as they bear all risks. (d) The small producer has a distinct advantage in his greater *power of knowing personal wants in the market*. In many industries the personal element plays so large a part that the small producer will for a long time be able to hold his own, even if he cannot oust the large producer from the field. Finally, *by co-operation of neighbouring small producers, it is possible to secure much the same opportunities with regard to* (e) *invention and improvement of processes and* (f) *utilisation of "waste"* that we have described as normally attendant on large scale industry.

It must be borne in mind that our comparison has been between small scale and large scale production, not between small scale production and monopolised production. Monopolised production is usually, though by no means always, production on a large scale. But production on a large scale is certainly not the same thing as monopolised production. Had we been speaking of the production of monopolised goods, it would have been possible to add many to the list of alleged advantages or economies in production, and some of the advantages of which we have spoken would in the case of a monopoly have been much more marked and undisputed. Thus in the matter of freights and again in that of advertising, many would admit that advantages accompany a monopoly who would deny that they accrue simply to large scale production.

This whole matter of the relative advantages of small

scale and large scale production has been in recent days the subject of acrimonious dispute, and can by no means be regarded as yet settled. We have chosen, therefore, to write suggestively rather than positively. For this very reason, however, the topic may furnish the better material for discussions and debate by teachers and their classes.

SUMMARY

1. Growth in the magnitude of industry has resulted in increased complexity of industrial organisation.
2. The entrepreneur directs the organisation of the factors, but his function is sometimes shared between many individuals.
3. Forms of organisation of the factor labour are simple associated effort, division of occupations, and division of labour.
4. Organisation of the factor nature gives rise to localisation of industry.
5. The limits of profitable organisation of industry are the size and character of the population, the amount of capital, the character of the industry itself, and the character of the government.
6. In some industries there are many advantages in production on a large scale. Against these may be set other features in which the small scale producer may hold his own, or even enjoy an advantage.

QUESTIONS

1. How was co-operation of the factors or agents of production secured before the Industrial Revolution ? Where does this method obtain to-day in advanced nations ?
2. Name some of the duties of an entrepreneur.
3. Name the different forms of business undertaking. Discuss them from the standpoint of their relative strength and weakness.

4. How does division of occupations differ from division of labour ?
5. State the advantages of the division of labour ; the disadvantages ; the advantages of large scale production ; the advantages of production on a small scale.
6. Describe the processes under a system of divided labour in some industry with which you are acquainted. Why does not farming lend itself to the division of labour ?

PART III.—EXCHANGE OR TRANSFERS OF GOODS

CHAPTER I

INTRODUCTORY

The Nature of the Subject.—We have now studied two of the main parts of economic theory. We have learned something regarding the consumption of goods, and also something regarding their production. We have now to study the question how and by what means goods are exchanged among men, and what determines the quantitative ratios in which they exchange. By the conditions of modern industry almost every man produces more of some one commodity or of some few commodities than he himself consumes ; and, on the other hand, every man consumes very many goods which he himself has not produced. This is only possible because men transfer goods from one to another. Such transfers or exchanges of goods constitute a very great part of our economic life. The business of an important industrial class, that of merchants, consists in effecting such exchanges. The operations in which merchants are engaged we call by the general name *commerce*. But commerce requires a multitude of other activities to assist it, and among these an especial

prominence belongs to the provision of means of communication and transportation, by public roads, railways, telegraphs, telephones, and banks. These instruments of commerce, while they do not confine their functions entirely to the assistance of merchants, help the whole community to accomplish desired transfers of goods.

Exchange.—Transfers of goods are of two kinds: they may be either one-sided transfers, as gifts, bequests, inheritance, taxes, and fines; or they may be two-sided transfers, and this is so with nearly all the economic transfers with which we have to do.

The part of Economics which we are about to handle is by most economists called "exchange," because the term "exchange," referring to two-sided transfers, covers so many of the transactions that are the subject of our study. But since money and banks, which are to be treated in the present part of this book, are agencies in assisting one-sided as well as two-sided transfers of goods, the expression "transfers" rather than the word "exchange" might perhaps express more completely the range of the subject, even if there be an advantage in adherence to tradition where that course does not seriously mislead.

As exchanges of goods regularly increase the utility of the goods exchanged, it is evident that exchange is a kind of production and might be treated under that general heading. Others have considered distribution, which is the subject of the following part of this text-book, as a branch of exchange. But the phenomena of exchange are of a character so distinct and so important that it is considered better to treat them in a part by themselves.

Advantages of Exchange.—It is not uncommon even to-day to hear men talk as if an exchange of goods could benefit only one of the two exchangers. Sometimes, indeed, they speak as if what is gained by one party to an exchange, whether an individual or a nation, must involve the loss of the other. We do not stop to think that, when we purchase a hat or a suit of clothes, we regularly profit by the transaction; but it is evident that, if we did not think the good purchased more useful to us than the money paid for it, we should not make the exchange. Let us study for a moment the reasons why men find it profitable to exchange. In the first place, (1) the *tastes and customs* which in part determine utility *vary* (a) *from nation to nation*, and (b) *from man to man*. It is evident, then, that when a commodity passes from an individual or a nation, having little taste for it, to another with a strong liking, the exchange increases the utility of the commodity. In the second place, (2) the *natural resources* of different countries *vary widely*. Goods which one country or one district can easily get in abundance, another country or district may only be able to produce with great difficulty. Thus, the maker of machines in the town and the farmer in the village can both profit by the exchange of the agricultural implements of the one for the wheat or cattle of the other. In the third place, (3) *individuals* also *differ* from one another either *by nature or by training in their fitness for different kinds of work*. Thus, one man is especially fitted by nature or by training to be a carpenter, another to be a miller. In all such cases each individual will find, it would seem obvious, his greatest advantage in doing that which he can do best,

and exchanging the surplus produced for other goods which he desires and others can produce to greater advantage.

The Machinery of Exchange.—In every modern nation there now exist on a large scale institutions and appliances for the furtherance of transfers or exchange. These may be briefly enumerated: (1) means of transportation and communication; (2) systems of weights and measures; (3) money and credit and banks; (4) commercial law and administration, including in some instances the assistance of consuls acting partly as commercial agents of their governments in foreign countries; (5) middlemen of all sorts, comprising retail and wholesale dealers. Inasmuch as exchange is a part of production, these instruments of exchange are also instruments of production. It is through them that goods receive the time and place utilities which fit them for final consumption.

SUMMARY

1. Transfers of goods are of two kinds: one-sided and two-sided. The latter are known as exchange, under which heading this general subject is usually discussed. Exchange develops the phenomena of value and price.
2. All exchange is regularly profitable to the two parties to the transaction, because men and places differ in their natural and acquired aptitudes for different kinds of production, and individuals and nations also differ in their tastes and customs in consumption.
3. Modern industry has developed an elaborate mechanism for its exchanges, including means of communication and transportation; systems of weights and measures; money and credit and banks; commercial law and administration; middlemen of all sorts.

QUESTIONS

1. Give examples of one-sided transfers ; of two-sided transfers.
2. What are some of the sources of advantage in exchanges between America and England ? Between a lawyer and a doctor ?
3. Mention some of the means of transportation ; of communication.
4. How would the adoption of international systems of weights and measures aid exchanges ?

CHAPTER II

VALUE

Meaning of the Term.—One of the most important and difficult problems in Economics, and the central problem in transfers or exchange, as well as in distribution, is that of the determination of value. Why do goods exchange for one another in the proportions that they do? Why do the proportions in which they exchange vary from time to time? This is the problem we now have to study.

First of all we must note that there are two closely related but distinct ideas of value, which have been called by the names “subjective value” and “objective value.” Let us try to understand these ideas and their relation to each other. Our study of the law of diminishing utility has already shown us that, as our stock of any commodity increases, the marginal utility falls; that is, we care less for an additional portion. We satisfy our most intense wants first, and, as the supply increases, our unsatisfied wants grow less and less urgent. If, for example, we had but a very small supply of water, we should use it for drinking purposes alone: the first increase might be employed for bathing; the second, for washing dishes and clothes, and so on. The more the supply increases, the less capacity would

a gallon have for exciting our desire for it, the less sacrifice should we undergo to get an additional gallon, and the less should we trouble ourselves about its loss. It is the marginal utility that determines the *economic importance* of any commodity in our estimation. These phrases, "capacity to excite desire," "marginal utility," "economic importance," are synonymous with the term "subjective value." For a brief definition, we may say, "subjective value is the capacity to excite desire." We should notice the close relation and yet the sharp contrast between utility and subjective value. A cubic foot of air has great utility, but it has no value. Yet anything, to have value, must have utility, since it is utility under a condition of scarcity that excites desire. We may sum up the relation of the two things thus: *utility is the power to satisfy wants; subjective value is the power to excite desire.*

How Subjective Value is Determined.—It is now easy to see how subjective value is determined. It is *utility under a condition of scarcity*. To possess value, a thing must be able to satisfy wants, and it must exist in less than sufficient quantity to satisfy all wants.

The Idea of Objective or Exchange Value.—The idea of objective or exchange value is simple. *Objective value is the quantitative ratio in which goods or services are exchanged.* Thus, if a pound of butter exchanges for four pounds of sugar, we say that it is worth four pounds of sugar, or that its value in terms of sugar is four pounds of that commodity. In our day most commodities are exchanged directly for the single commodity money, and are exchanged only indirectly for those goods or services which we consume or use.

Therefore we usually think of value in terms of money; that is, we think of prices. For *price is objective value expressed in terms of money*. But if a unit of one commodity exchanges for a shilling, while a unit of another commodity exchanges for two, it is evident that the value of the first commodity is one-half that of the second.

The Relation of Objective to Subjective Value.—

And now let us compare the two ideas of value. Let us see how from these individual valuations an objective market value issues as a consequence. Imagine a market to which each of eight farmers have brought two loads of corn to sell, and to which eight other persons have come, each of whom wishes to buy two loads. Suppose each seller to have settled on a price per quarter less than which he does not wish to take, and suppose each buyer to have fixed a price more than which he does not intend to pay. Let these estimates be as follows :

Buyers' maximum prices : 39, 37, 35, 33, 31, 30, 29, 28s.

Sellers' minimum prices : 40, 39, 38, 34, 32, 30, 29, 28s.

Assuming that each one is alive to his own interest, and that he does not make a bargain until he is sure that he cannot fare better, what will be the market price of corn per quarter ?

The price evidently cannot be 40 shillings, for no buyer will pay so much ; it cannot be 35, for as five are willing to sell at this price and only three to buy, the competition of the five in their efforts to sell to the three must bring down the price. Continuing to test each possible price in this way, we get the following table :

At 34 shillings there are 3 buyers and 5 sellers.

At 33 shillings there are 4 buyers and 4 sellers.

At 32 shillings and sixpence there are 4 buyers and 4 sellers.

At 32 shillings there are 4 buyers and 4 sellers.

At 31 shillings there are 5 buyers and 3 sellers.

It appears that at 32 and at 33 shillings (or at any price between) there are as many buyers as sellers, namely four, and that four loads will be sold at a price somewhere between these limits. These are the prices at which demand and supply are equal.

The actual buyers in this market are those with the estimates 39, 37, 35, 33. The last of these is called the marginal buyer, because with a rise in the price he would be the first to be excluded. The actual sellers are those with the estimates 32, 30, 29, 28. The first of these is called the marginal seller, because with a fall in the price he would be the first to be excluded. Notice that the marginal buyer's estimate—the marginal demand price—is about equal to the marginal seller's estimate—the marginal supply price. We may say, then, that *the market price is an equilibrium between the existing state of the supply and the existing state of demand*. In a previous chapter on Demand we have sufficiently considered the forces behind the buyers' estimates. We must now inquire into the forces governing the sellers' estimates, that is, those behind supply.

Different Causes of Scarcity.—Scarcity is not everywhere the result of the same cause. First, (1) we may have *absolute scarcity*, as in the case of paintings by old masters, unique natural products, etc. In such cases the quantity cannot be increased at all. This class of

goods is not very important. Secondly, (2) we may have *monopoly scarcity*, a scarcity caused by the fact that the quantity is under the control of one or more persons who act together so as to control the offer of such goods. The case of monopoly goods will be discussed separately and at length in the following chapter. Finally, (3) we may have *scarcity caused simply by the fact that men must undergo sacrifice in order to increase the quantity*. The greater proportion of the goods which we consume belong to this class. A simple way of describing such goods would be to say that they are *freely produced*.

Cost of Production and Value.—The value of this third class of goods is due to precisely the same cause which is at the back of the value of all goods, namely, utility under a condition of scarcity. But it is commonly said that with these freely reproducible goods cost of production determines value. It is true that the price of these goods is not far from their *expenses of production*. It is easy to see why : If any article is selling for five shillings when the expense of producing it is only one, many persons will turn to the manufacture of this article, the supply is increased, and the price falls to something like a shilling. But what determines the expenses of production ? Why cannot a baker, for example, sell bread for much less than sixpence a loaf ? To say that he must pay a certain price for flour among other things, is merely to put the difficulty one step further back. Why will all those who immediately or remotely help to make the flour not work for less ? There are two possible answers : They might in some cases prefer to be idle rather than work for less, or they might feel that they were sacrificing the opportunity of

making something else for which there are wants equally urgent. Here we discover the fundamental sense in which cost of production limits the supply of an article : It is either on account of the pain of further work, or abstinence, or postponement of enjoyment, or because by making one article the opportunity of making another is sacrificed. The supply of newspaper boys, for example, is limited partly because some boys prefer to be idle, if they can, rather than work in this light way, and partly because other boys who are willing to work find that there is opportunity of earning more by ministering to the wants of other people than those who wish to buy newspapers or to get them sold.

Behind the expenses of labour, raw material, etc., which the business man has in mind when he speaks of cost of production, are the real sacrifices involved in production. The exact connection between the two is not always easy to trace, and in studying many problems in business it is sufficient to pay attention to the expenses of production alone. In the remainder of this chapter we shall use the term " cost of production " in this sense.

In discussing the conditions governing the supply of commodities freely reproducible, many writers distinguish three classes, as follows : (a) those which can be increased in quantity without proportionate increase in cost ; (b) those which can be increased at a proportionate cost ; and (c) those which can be increased in quantity only by a more than proportionate increase of cost. The difference can be briefly expressed by saying that production in the first case conforms to the law of increasing returns or diminishing costs ; in the second, to that of proportionate or constant returns ; and in the third, to the law of diminishing returns or increasing costs.

It is doubtful whether there is any industry whatever in which the law of increasing returns operates indefinitely or until the whole market is supplied. It may be true of transportation or other natural monopolies, although even in these cases it may be questioned. But there is a competitive field in which it clearly does not operate without a limit. In agriculture, manufactures, and commerce there is at first an increasing return, possibly for a time a constant return, and then a diminishing return as the establishment grows in size. Sooner or later the point of maximum efficiency is reached, and then the law of increasing costs begins to operate. It is clear that in agriculture that limit is attained rather quickly, while a textile factory can assume a large size before the point of maximum efficiency is passed. If it were not for this limited operation of the law of increasing returns, the conditions would permit of the growth of monopoly over the entire industrial field, inasmuch as the largest producers could undersell all others.

Marginal Costs Explained.—In the industrial world, as it is constituted, the actual costs of production are not the same for all units of supply, no matter whether the supply be large or small. Thus, in the case of agriculture, some farmers have farms more fertile or better situated than others. In manufactures, the same difference obtains in a degree much less pronounced. Some entrepreneurs are better organisers than others; some have better situations with reference to the raw materials or the market, etc. The costs being thus different, what are the costs which determine value from the side of supply? It cannot be the least cost or the average cost, for in either of these cases a large part of the product would be sold for less than its cost. It follows that the determining costs are the greatest, or as we may call them, the *marginal costs of producing*

that supply which will be in equilibrium with the existing demand.

The "Frictional Elements" Considered.—In order that there might be perfect competition, it would be necessary that every producer should always know and seek his own economic interest ; that he should be able to move his labour, his capital, and his land from one occupation to another, or to no occupation at all, at a moment's notice, and without that loss which the *vis inertiae* of business actually occasions in such cases. From the fact that these conditions are imperfectly realised, it results that the prices of commodities day by day, or, as they are called, the *market prices*, fluctuate with the importance of the "frictional" elements present, as well as with changes in the state of demand and changes in the costs of production. But the market price of competitive goods is kept from violent fluctuations by the fact that competition is also present, and that, so far as the competition is free and complete, it is working to produce harmony between demand and supply, between marginal utility and marginal cost, between producer and consumer.

It remains to consider briefly but in detail some of the "frictional" elements which are most frequently present in modern business, preventing the realisation of the price which would be perfectly competitive.

1. *Custom.*—One influence which we have to notice as opposed to competition is that of custom. By force of custom, acting especially in retail markets, the prices of commodities may stand for some time above the normal level. It is evident, however, that custom is powerless to maintain a price below the normal, unless the seller has some economic advantage that he is willing to share with

his customers. Otherwise such a price would spell ruin for the retail dealer.

2. *Immobility of Labour*.—A second “frictional” element is the immobility of labour. Our law of value assumes a competition by which labourers will move freely from place to place, and from occupation to occupation. There are very many cases in which the facts of real life do not accord with this assumption, although it is true that with advancing civilisation such competition approaches nearer and nearer to realisation. It is easier than it was before for men to travel from places in which labour is plentiful to places in which labour is scarce. On the whole, it is easier than it was for men to transfer their labour from one industry to another. Especially is it easier in our day for parents to choose the occupations for which they will train their children. But inasmuch as labourers are frequently hindered even now by home ties, or poverty, or ignorance, from carrying their labour to the best market, and inasmuch as they are similarly prevented in many cases from entering into occupations which might prove more remunerative, it often happens that labour in different places or in different occupations is not rewarded in proportion to the sacrifice involved. In such cases, although the supply of the commodity may be determined by the cost of production, yet the cost of production of different commodities will not be proportioned to the actual sacrifices incurred, and there is in such cases an apparent rather than a real exception to our theory of value.

3. *Unequal Taxation*.—Unequal taxation also gives rise to exceptions to our theory of value, unless we are prepared to regard taxes themselves as a part of the cost of production. If taxes were laid in equal proportions upon all industries, so that all products were raised in price in equal proportion, then the ratio in which different commodities would exchange for one another might remain the same. In other words, values might not be affected. But such taxation is clearly impossible, and therefore we are obliged to qualify our theory of value on this account.

4. *Haphazard or Speculative Production.*—In our complex industrial system producers have to plan their production for distant times and distant places, in ignorance of what rival producers may be doing. It can easily be seen that in such a state of things the production of some commodities may be carried far beyond the point at which the demand for the commodity is great enough to permit a price that will repay the cost of production. The resulting glut in the market may continue for some time before the entrepreneurs by lessening production can secure a return to normal prices. The technical conditions of modern industry contribute to the same result. When a producer has invested large amounts of capital in the form of expensive buildings and machinery, he is not unlikely to continue production even when the price of the product is too low to repay all the costs. For, when such large fixed capitals remain idle, the abstinence, or postponement of enjoyment, involved in the production of that capital is receiving no reward at all, to say nothing of the fact that the buildings and machinery may actually be deteriorating more rapidly than they would if they were busy. The entrepreneur, therefore, has to choose, not between gain and loss, but between a greater and a lesser loss, and, in choosing the lesser loss, he may keep buildings and machinery working even when the market is glutted with the commodity which he is producing. It is for this reason among others that in modern days industrial depression, when it comes, is so long continued and so distressing. Prices cannot easily or rapidly return to the level of normal competition when supply manifestly outruns profitable demand.

5. *Value of Products and By-products.*—The fifth case, that of products and by-products, really accords with our theory of value, but requires special attention. When, as incidental to one main line of production, one or more products of less significance result, the chief commodity is called the product and the others by-products. Thus wheat is a main product of which straw is a by-product. To take another illustration, the Standard Oil Company of

the United States has as its central industry the refining of crude petroleum into illuminating oils, but with every year scientific discoveries have made possible new uses for parts of the crude oil which were formerly thrown away. These products incidental to the production of illuminating oil, or by-products as they are called, include lubricating oils, aniline dyes, paraffin, etc. In such cases it is evident that the theory of value is complicated in its application. The general principle to be noticed is that the combined value of the products is determined by the total cost of production. Producers, of course, regulate the production of the joint products so as to secure the largest total return. This is commonly done by producing all of the main product that can be sold at profitable prices, at the same time selling the by-products at such prices as will insure their sale. In such cases, if the demand for the principal product increases, production also increases, and, as larger quantities of the by-products naturally result, these must be sold at lower prices, unless it happens, and this is unlikely, that the demand for the by-products increases at the same time and at the same rate as does the demand for the main product. Sometimes the demand for the by-product extends so much as to make it profitable to regulate production according to its price rather than according to the price of the main product. Thus, in the case of mutton and wool, some sheep-raisers are so situated that wool is the main product of their business, and mutton a by-product, while with other producers the order is reversed. We may say in conclusion, then, that the total prices of products and by-products are determined by total costs, and that the relative prices are determined, subject to this condition, by the relative market demand for the different commodities.

SUMMARY

1. Subjective value is the capacity of any good to command a sacrifice. Objective or exchange value is the quantitative ratio in which any two goods exchange. The second sort of value depends upon the first.
2. Competitive value is the meeting point, or point of equilibrium, between supply and demand.
3. Different conditions of scarcity are: absolute scarcity, monopoly scarcity, and scarcity due to the sacrifices involved in production.
4. Cost of production, which controls supply, is used in at least three senses: expenses of production, pains of production, and sacrifice of opportunity.
5. The effective cost of any quantity of a good is the highest or marginal cost of producing that quantity.
6. Perfect competition is rarely if ever realised.
7. "Frictional" elements interfere with the free working of competition.

QUESTIONS

1. What is subjective value? Objective value? What is their relation?
2. Show how a market price is determined.
3. Describe the three causes of scarcity of economic goods.
4. What are the various meanings of the term "cost of production"?
5. What is meant by marginal costs?
6. What are some of the actual conditions opposed to the free working of competition?

CHAPTER III

MONOPOLIES AND MONOPOLY VALUE

IN the preceding chapter we reached the conclusion that, in the case of goods freely produced under competitive conditions, value is determined on the side of demand by the marginal utility, and on the side of supply by the marginal cost of production. At the same time it was also pointed out that all goods are not thus produced. The largest and most important class of such exceptional goods consists of those controlled by monopolists. To complete our theory of value, therefore, we must now inquire how monopoly value is determined ; and, in order that our inquiry may be more satisfactory, let us first see what monopoly is.

Definition and Classification.—It will be well for the student to study very carefully the following definition, inquiring at every stage what the words and phrases exactly signify : *Monopoly means that substantial unity of action, on the part of one or more persons engaged in some kind of business, which gives exclusive control, more particularly, although not solely, with respect to price.*

Many classifications of monopolies have been made by different writers, and still others might be suggested ; but it is believed that the following classification,

which explains the origin of the different monopolies and suggests their real nature, will prove as helpful as any to the student :

A. Social Monopolies.

I. General Welfare Monopolies.

1. Patents.
2. Copyrights.
3. Trade-marks.
4. Public consumption monopolies.
5. Fiscal monopolies.

II. Special privilege monopolies.

1. Those based on public favouritism.
2. Those based on private favouritism.

B. Natural Monopolies.

I. Those arising from limitation of supply of raw material.

II. Those arising from peculiar properties inherent in the business.

III. Those arising from secrecy.

Social Monopolies.—Businesses are “social” monopolies *when they are made monopolies not by their own inherent properties, but either by legislative enactment or by forming so close a connection with great natural monopolies that they partake of the character of these.*

In old times kings and queens frequently granted exclusive business privileges to favoured persons, and permitted no one except those named to engage in such undertakings. Such monopolies, however, became so odious that sovereigns were compelled to cease their grant. Governments still create exclusive privileges by *patent* and *copyright* laws, but they do so on behalf of the general public. Authors and inventors are given

exclusive rights over their productions for a limited period. These monopolies have perhaps justified themselves through the stimulus which they have given to invention and authorship. Yet it must not be forgotten that all intellectual achievements are in part a social product,—that they are due in great measure to earlier acts. Thus the telephone was preceded by a century of scientific invention and discovery in the sphere of sound transmission, and most of that investigation was ill rewarded. On the whole, experience seems to justify the conclusion that patents and copyrights are beneficial, but that patents do not rest on so firm a basis as copyrights, because no two persons would ever write precisely the same book.

The *trade-mark* is a legal monopoly similar to the patent and the copyright. In connection with lavish advertising, trade-marks in recent days have been made the source of enormous profits.

“Public consumption monopolies” and fiscal monopolies call for a word of special comment. They can be distinguished only by the object which the Government has in view in their establishment. If the Government manages for itself or grants to another a monopoly of the liquor traffic with the object of regulating the consumption, the monopoly may be called a “public consumption monopoly.” If, on the other hand, the chief object is not regulation but income, the monopoly is fiscal. Often the two objects are so blended that it is difficult or impossible to give a distinctive name to the monopoly which results.

Our classification names two kinds of “special privilege monopolies.” Those monopolies which are due to special tariff advantages or to other legislation

are rightly said to be *based on public favouritism*. The other class of "special privilege monopolies" consists of those which grow up through special favours granted by other monopolies, especially natural monopolies, such as railways.

Natural Monopolies.—Natural monopolies are *those which depend for their existence on natural forces as distinguished from social arrangements*. They are independent of man's will and desire, and sometimes even in direct opposition to it. The words which we have used in our classification will explain sufficiently the different sources from which they arise. By far the most important of all monopolies are natural monopolies of the second class, and the chief among them are the following : roads and streets, canals, docks, bridges and ferries, waterways, harbours, lighthouses, railways, telegraphs, telephones, the post-office, electric lighting, waterworks, gasworks, street tramways and the like. *Whenever there is a decided increment in gain resulting from combination, we discover a tendency to monopoly which will overcome all obstacles. This increment of gain, which is the cause of monopoly, is always present in businesses that occupy peculiarly favourable spots or tracks of land, and furnish services or commodities which must be used in connection with the plant. This may be said to be the law of natural monopolies.*

Of late years there have been many economists who argue that monopoly may arise *naturally*, without any of the advantages that have been indicated, through the superior power of large capital and the superior economy of great concentration. They would call such monopolies *capitalistic*. There is not space to furnish all the reasons for dissenting from this conclusion regarding so-called capitalistic mono-

polies. One or two very cogent pleas may, however, be stated. An exhaustive study of the cases cited in support of the alleged tendency to monopoly inherent in large capital has failed to reveal a single instance in which the monopoly did not enjoy one or many of those monopoly advantages which we have already mentioned and explained. Moreover, many cases in which the possession of large capital seemed on the surface to be a dominating influence have been cases in which the monopoly was so short-lived as to furnish little support to the argument of those who cited them. After all, whatever may be the advantage conferred by large capital, we must remember that capital is so plentiful that one gigantic plant can always find a rival whenever a slight margin of profit invites its establishment.

Our conclusion then may be stated as follows: There is a great and growing field of industry in which competition is not natural or permanently possible, for reasons which have been explained; there is another sphere within which monopoly may easily be engendered by unwise social action, and yet is likely to be narrowed as the nation grows in intelligence and thoughtfulness; and finally there is a third area within which natural monopoly does not and cannot exist, and social monopoly in its turn is unlikely to arise.

Determination of Monopoly Price.—And now, having seen what monopoly is, we may attempt an answer to the question, How is monopoly value or monopoly price determined?

First of all, we may say that monopoly value, like any other value, is determined by the relation between demand and supply, and that demand here as elsewhere is settled by marginal utility. But the supply

is not fixed as it is under normal competition by the cost of production, but by *the desire of the monopolist to secure the maximum of revenue possible in the existing state of demand*. In other words, the monopolist, freed from competition, and governed only by demand, is able to adjust supply to demand in such a way that the price will stand at the point of *highest net return*. In determining what price shall be fixed and what quantity supplied,—in other words, what is the point of highest net returns,—the monopolist consciously or unconsciously proceeds according to the following principles :

1. He realises that every increase in the supply of his monopolised product will result in lowering the marginal utility, and hence the demand price of the product, while every decrease in the supply will result in a higher marginal utility, and in consequence in a higher price.

2. Of the expenses of production there are some which vary in well-nigh regular proportion with the variation in the supply. Thus, if the product is doubled, the cost of raw material will be just about doubled. Such expenses are called *variable expenses*.

3. Other expenses, within certain limits, remain more nearly the same, no matter what may be the amount of the product. These, called the *fixed expenses*, would include the cost of plant, the salary of a superintendent, interest on bonds, etc.

It follows from the above principles that the monopolist, since he is seeking the maximum net revenue from his business, will pay no attention to fixed charges in establishing the price of the product, but will consider only the variable expenses in connection with the probable demand for his goods at various prices.

An Illustration.—We may illustrate by an example the operation of these principles. The following table shows in parallel columns the number of sales of a monopolised good at different prices ; the total resultant earnings ; the variable expenses ; the fixed expenses ; the total expenses ; and finally the net revenue or monopoly profit :

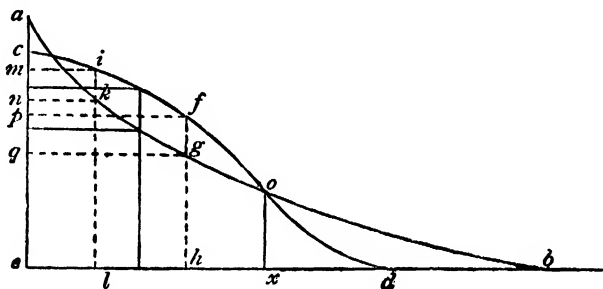
MONOPOLIES AND MONOPOLY VALUE

Price per Unit	Number of Sales	Total Earnings	Variable Expenses per Unit	Total Variable Expenses	Total Fixed Expenses	Total Expenses	Net Revenue
s. d.		£	d.	£	£	£	£
2 6	600,000	75,000	9	22,500	60,000	82,500	— 7,500
2 3	800,000	90,000	9	30,000	60,000	90,000	Nil
2 0	1,200,000	120,000	9	45,000	60,000	105,000	+ 15,000
1 9	1,800,000	157,500	9	67,500	60,000	127,500	+ 30,000
1 6	2,500,000	187,500	9	93,750	60,000	153,750	+ 33,750
1 3	3,500,000	218,750	9	131,250	60,000	191,250	+ 27,500
1 0	5,500,000	275,000	9	206,250	60,000	266,250	+ 8,750

Study of the table will show why, in the case assumed here, the monopoly price will stand at 1s. 6d. Competition, if it were present, would keep on increasing the supply as long as normal profit could be obtained. In our illustration the lowest price at which production could be carried on so as to secure some profit above the expenses of production would be a shilling ; and a shilling would therefore be the competitive price or the price determined by the balancing of marginal utility against marginal cost of production. But, since the monopolist has such control over the production that he can control the supply, he will cut off production at 2,500,000 units, at which point the marginal utility,

and hence the demand, will fix a price of 1s. 6d., and will give the largest net return, £33,750.

The student may be interested in seeing the same thing illustrated by a diagram. In the following diagram, we take only one possible case—that in which the monopolist is producing a commodity the making of which falls under the law of increasing returns.



In the diagram the curved line ab is taken to represent the varying cost of production, and is hence called the supply curve: the line cd , representing the *state of demand*, is similarly called the demand curve. The line ox would represent the price under competitive conditions. The perpendiculars fh and il represent the prices that would be fixed by the demand if the monopolist were to limit the supply to eh or el respectively. The lines gh and kl would represent the total cost per unit of producing these various quantities. The parallelograms $ghqe$ and $klne$ represent the total costs of the different quantities, and the parallelograms $fhpe$ and $ilme$ represent the total returns from sales. Consequently the smaller parallelograms $fgpq$ and $ikmn$, which equal the parallelograms representing total income, minus the parallelograms representing total costs, represent the net return. If the character of the two curves be known, it is possible to determine by mathematical formulæ where the parallelogram of greatest net return will fall, and consequently what will be the monopoly price. It will be well for the student to draw a similar diagram

and find by experimentation the parallelogram of greatest area, and from this the monopoly supply and monopoly price.

The Effect of a Tax.—Our numerical illustration and our diagram may both be made to convey a lesson regarding the influence of taxation upon monopolies and monopoly price. Fixed expenses have no influence in determining the price. If, therefore, a fixed tax, say of £8750 a year, were to be laid upon this monopoly, it would not result in an increase of price. A study of the table will show that with such a tax the net revenue at price 2s. would be £6250 ; at price 1s. 9d., £21,250 ; at price 1s. 6d., £25,000 ; at price 1s. 3d., £18,750 ; at price 1s., nothing. Thus price 1s. 6d. will still be the point of maximum net revenue and hence the monopoly price. On the other hand, a variable tax, for instance a tax of 3d. per unit, would result in this case in raising the monopoly price. In our illustration, such a tax would make the net revenue at the price 2s., nil ; at the price 1s. 9d., £7500 ; at the price 1s. 6d., £2500 ; at 1s. 3d., a minus sum of £16,250. Though the monopoly would find its profits greatly curtailed by such a tax, consumers would be compelled to pay 3d. more per unit for the monopoly product. The possible advantage which society might draw from the tax would therefore be wholly or in part offset by the increased cost of the commodity. Such a raising of the price will not take place, however, if the demand at the higher price is not sufficient to make as great a net revenue as at the lower price. We may conclude, therefore, that fixed taxes, or taxes on the net revenue of a monopoly, cannot be shifted wholly or in part by a change in price ; while taxes laid in proportion to the amount of business, since they contribute an addition to the variable expenses, may be wholly or in part shifted by a change in price.

The student may profitably test these statements regarding monopoly by hypothetical cases after the manner of our numerical illustration, and by drawings

similar to the diagram used to illustrate the determination of monopoly price.

A Law of Monopoly Price.—It is sometimes said that the price of a monopolised good depends solely upon the will of the monopolist. In the strict sense of the phrase this is not true. As our explanation has shown, the monopolist is *forced by economic motives* to establish such a price as will give him the maximum net revenue. There are certain conditions on the side of demand which therefore have a decisive influence in determining monopoly price. We may group the most important of these in a general statement which may properly be called a *law of monopoly price*: *The greater the intensity of customary use of the monopolised commodity or service, the higher the general average of economic well-being, and the more readily wealth is generally expended, the higher will be the monopoly price which will yield the largest net returns.* Thus monopoly, without any effort of its own, shares in the increasing wealth of a country, and absorbs a considerable part of this. It is, for example, among other influences, the larger wealth and the greater willingness to spend freely that makes monopoly more profitable in the United States than in Germany or other European countries. The search for other illustrations of the law should prove an interesting and valuable exercise for the student.

Public Policy regarding Natural Monopolies.—It was long ago said by a shrewd English engineer that, where combination is possible, competition is impossible. Now combination is always possible in the case of natural monopolies of the second class. (See the classification.) Indeed, combination in such businesses

is almost inevitable. If either of two gas companies in a city, with a hundred thousand pounds capital, can, without combining, make ten per cent. profits, they will probably, when combined, make much more than this. The force, indeed, drawing them together works as constantly, if not as uniformly, as the attraction of gravitation.

The testimony of experience on the point is ample. There is little or no competition in this field. There is sometimes "war" to settle the terms of combination, and popular language, when it uses the word "war" in this connection, employing metaphorical language, is scientifically correct. What, then, should be the policy of a government in dealing with these industries? Ought we to substitute government ownership and management of such monopolies for private ownership and management? Some of the class have been in public hands so long that we no longer think of them as a possible field for private enterprise. Such, for instance, are the roads and streets and the post-office. With regard to others, it would at least be as well to stipulate a reservation of public rights which will later permit a government easily and readily to make the changes that the future may show to be wise.

Advantages claimed for Public Ownership.—The principal advantages claimed for public ownership of such monopolies call for brief discussion.

1. *Increase of Public Prosperity.*—A wide diffusion among the community of the great incomes now reaped by these private monopolies would tend to prevent an undue concentration of wealth and at the same time it would promote general prosperity. Most of the enormous fortunes of America have, it seems, sprung

directly from natural monopolies owned privately. It should be noted that, if such private monopolies are taken over by a government, the income derived from them may be diffused by either of two plans. Charges may be fixed so low that the price will simply cover cost without allowing for profits,—the method pursued, in fact, if unwittingly, by our present telegraph service ; or a profit may be obtained from the industries, and this may be used to lower taxes or to benefit the people in other ways.

2. *Economy*.—How enormous is the waste of war in competition attempted in the field of natural monopolies may be seen in many quarters. Indeed, it has been estimated that, in the matter of railway construction and working alone in the United States during the past fifty years, economic resources have been wasted which, economically applied, would have been sufficient to build comfortable homes for all the men, women, and children now living in that country. There is a basis of reason, then, for the claim of those who maintain that public ownership of such monopolies would be more economical than the policy of private ownership and management has been.

When services of a monopolistic nature are performed by the public, great economies can often be secured by combining various services, such as water, gas, and electric lighting. Moreover, better management is not unlikely to result. It is a popular superstition, now frequently abandoned, that private enterprise is always and everywhere superior to public enterprise. The fact of the matter is that each will prove superior in its appropriate field.

Nor is it true that private enterprise always excels

public enterprise in the work of initiating improvements. Our own Government has introduced into the telegraph service some improvements which private companies were reluctant to adopt on account of the expense. The American post-office has pointed to the path for American express companies to follow in developing the money-order business. Lastly, our Postal Savings Bank has set a pattern in such matters as the establishment of branches and the use of stamps posted on small cards for making savings.

3. *Political Purity*.—Private monopolies should at least be controlled by public authority; and that means an interference with private business, which may beget corruption. Hardly a year passes that the public in America at any rate is not shocked by the disclosure of bribery and corruption in some one of the many ways by which monopoly in private hands seeks to secure privileges, to free itself from duties, or to escape from deserved punishment. An experienced lawyer prominently identified with monopolistic concerns declared in a public address that the “ante-natal tax” which American companies were obliged to pay,—that is, the bribery necessary for securing exclusive liberty,—constituted a regular element of the expenses of their business. This is one reason why American city government has been so costly. With public ownership and management of such monopolies, public interests and private interests would be identified, and the citizens could offer undivided allegiance to the cause of good government. This may afford a warning to ourselves.

4. *The overthrow of Injurious Social Monopolies*.—It is generally agreed to-day that many social monopolies are advantageous, but there are others which are

distinctly injurious to the best interests of society. Some of these monopolies in America have been made possible by special favours received from the natural monopolies which we are discussing ; as, for example, by receiving lower freights or railway charges for the transport of goods than competitors could secure. If all traders could be guaranteed just and equal treatment in their relation to natural monopolies, the limits of competition would be extended, while the limits of monopoly would be restricted. But it is problematical whether such treatment can be expected while natural monopolies remain in private hands. This problem, though more acute in the United States at present, is not without its lessons for Englishmen.

Jevons' Criteria.—The economist Jevons, as a result of careful study, reached the conclusion that certain principles or characteristics enable us to judge what monopolies the State may most safely undertake to manage. These characteristics may be briefly summarised as follows : (1) the business should be of a routine nature, as, for example, is the work of the post-office ; (2) the business should minister to a permanent and widespread public need ; (3) the business should be of such a nature as to be constantly subject to public criticism ; (4) it should be of such a nature as to require an amount of capital relatively small in proportion to the amount of business done ; (5) and finally it should be of such a nature that the technical apparatus needed for its successful management may be easily and accurately understood.

With regard to these criteria, it may be observed in the first place that they afford information only of the businesses the State is *most likely* to conduct with success—success or failure being here estimated solely from the standpoint of the private business manager. In other words, there is no place in this statement of principles for the consideration

that the State may promote the social welfare by managing business at what, in the language of the private entrepreneur, would be called a loss. Our public highways are now everywhere a Government monopoly, created and maintained by taxation, not by fees or tolls. Judged solely by the standard of private management, they, therefore, do not constitute a successful business. Yet no one to-day would advocate a change in public policy which alone could make their management "successful."

In the second place, it may be observed that, although we may be unwilling permanently to restrict the State's activity within the "ring fence" thus set up, yet we may well use Jevons' criteria as an aid in determining the order in which the State should assume the management of natural monopolies. Furthermore, it will appear on reflection that differences in the degree to which various natural monopolies now conform to these criteria are not permanent, but are ever changing. Thus the railway business is growing more and more susceptible to routine management; the need for its service becomes every day more widespread; it falls more and more under the intelligent criticism of the public. We may, therefore, ask whether, judged even from the standpoint of private business, all natural monopolies may not in time be successfully managed by the State.

Conclusion.—Public sentiment in favour of public ownership of the natural monopolies of the second class seems in many countries to be gathering volume and force. The advantages which might result from such a policy have been explained. But, recognising these, we must not overlook the enormous difficulties that confront government ownership and control,—the serious problems of administrative organisation involved, the need of improving the civil service, and of securing greater honesty and efficiency among public officials. In the case of State railways, too, the

question arises of rates and of the conflicting demands of different trading, industrial, and other interests. In Continental countries these difficulties have not been trifling, and are still far from a final solution.

Even with the present strong tendency toward public ownership, it must be of necessity a long time before all natural monopolies will pass out of private hands. Meanwhile, there will remain the perplexing question of the public control of such undertakings. No question in Economics is more worthy of the careful consideration of the thoughtful student who desires to equip himself for honest and intelligent citizenship.

SUMMARY

1. The essential idea in monopoly is unity of action, leading to control of price and other conditions.
2. Monopoly value differs from competitive value because the supply of monopoly goods is not determined by cost of production.
3. Monopoly price is the price of maximum net revenue. In determining the supply and the price, the monopolist disregards fixed expenses ; hence a fixed tax on monopoly cannot be shifted.
4. Monopoly price is controlled on the side of demand by the wealth and purchasing habits of consumers.
5. It is claimed in favour of public ownership of natural monopolies that the policy diffuses prosperity, is economical, keeps politics pure, and overthrows injurious social monopolies.

QUESTIONS

1. Define monopoly. Name and define the different classes of monopoly. Mention some monopolies of which you have knowledge, and explain what monopoly advantages they enjoy.

2. Sum up in a brief statement the peculiar properties of natural monopolies of the second class. Mention some monopolies of this class.
3. Show by a numerical illustration and by diagram how monopoly price is determined. Explain the difference between monopoly price and competitive price.
4. Explain differences in the effect of different methods of taxation of monopolies.
5. What advantages are claimed for public ownership of natural monopolies? What dangers are involved in such a policy?
6. State the law of monopoly price.

LITERATURE

- R. T. Ely's *Monopolies and Trusts*.
 J. W. Jenks' *The Trust Problem*.
 H. W. Macrosty's *The Trust Movement in British Industry*.
 D. H. Macgregor's *Industrial Combination*.

CHAPTER IV

MONEY

HAVING discussed at length the fundamental principles on which exchange and value rest, we now proceed to consider the nature of the complex mechanism by which exchange is effected. At the very centre of this mechanism we find money, the tool of exchange. We have already explained in our historical study how from the custom of making gifts men passed to regular exchange by barter, and how from barter the regular use of some one thing or some few things as means of making exchanges everywhere arose. With the handicraft stage men had come to employ the precious metals for this purpose, and money, in the modern sense of the word, thus became a regular institution.

The Definition of Money.—But what is money? When we try to define the word, we note that usage is by no means uniform. It is often convenient to employ the *popular* meaning of the term, according to which money is *anything that passes freely from hand to hand, as a medium of exchange, and is generally received in final discharge of debts*. But there is a narrower conception based upon the functions which money fulfils in the modern world of business intercourse. In the first place, (1) we find that money serves everywhere

as a *medium of exchange*. This use, the first to be developed, may be regarded as the principal function of all money everywhere. Our present civilisation would be impossible without money as a medium of exchange. Without such a medium, a man with a horse who wanted a coat would be obliged to hunt for a tailor who wanted a horse, and, even after finding him, he might be unable to effect an exchange owing to the inequality in value of the things to be exchanged. In the second place, (2) we find that money serves directly and immediately as a *measure of value*. It is frequently said that money is a "denominator" of values, and usually this expression has the same meaning as that just mentioned. This second function springs naturally from the first, for, as men make exchanges commonly for some one commodity, that commodity comes to serve as a standard by which the exchange values of all exchangeable things are measured. That this function may be fulfilled there is usually provided a definite, concrete, money unit like our gold sovereign, which consists of 123·27 grains of gold. 22 twenty-fourths are of fine gold and 2 twenty-fourths of alloy. 20 troy pounds are coined into 934 sovereigns and 1 half-sovereign, and an ounce is equivalent to £3 17s. 10½d. When, having such a unit, we say that a commodity is worth £10, we mean that the exchange value of the commodity, or its power of commanding other commodities in exchange, is ten times that of the monetary unit. Yet it sometimes happens that we name values, not in terms of the money actually used, but in those of some money which has been in earlier times the regular medium of exchange. Thus, nowadays we often hear values reckoned in guineas, though it is

long since there was any money coined of that denomination ; and the silver pound filled the position through a large period of English monetary history of the recognised monetary standard, while the coins in current use were of smaller denominations. Such money is called " money of account." In the third place, (3) money serves the function of a *standard of deferred payments*. If I wish to sell commodities or services to-day to someone who can pay me only at some future time, it is of the utmost importance that we should have some agreed standard according to which the payment should be made. This function of money is usually facilitated by its possession of the quality of *legal tender*, though, in fact, such a quality is by no means necessary to the fulfilment of the function. By the use of the term " legal tender " we mean simply that the Legislature has declared that any one having a debt to pay may discharge his debt through the " tender " or offer of the prescribed commodity, and that in case of a suit at law the courts will pronounce such a tender to have been legal. Money has a fourth function, (4) that of serving as a *store or receptacle of value*, in such a way that the value may be transferred from place to place and from time to time. Thus Roman gold money, preserved for two thousand years, has retained a value to our own time ; and gold money taken across the Channel or the Atlantic bears with it its stored-up value.

And now we may sum up what we have said in a formal definition of money in the narrower sense of the word. *Money is any commodity that serves as a medium of exchange, as a measure of value, as a standard of deferred payments, and as a store of value.* The meaning

given to the word in the following pages will in each case be evident from the context.

Qualities Desirable in the Material of our Money.—

Many things have been used as money at one time or another in the world's history : cattle nearly everywhere ; furs, especially in the Northern countries ; oil ; wampum, among the early New Englanders ; tea, at Russian fairs ; tobacco, as in Maryland and Virginia ; all the baser metals ; and the two precious metals, gold and silver. Of all the metals, gold and silver have in civilised nations been found to be most fit for monetary use. Of the two, gold has shown a special fitness, and now bids fair to survive as the money metal of the future. Nevertheless, silver is still used everywhere in large quantities, although among advanced nations it generally occupies a subordinate position. The qualities which have given gold and silver their predominance for use as money are precisely those qualities which we may readily recognise as those that all money should certainly possess. In the first place, they are very *generally desired, independently of their monetary use*, for they can be used in the arts as well as for ornament. This circumstance imparts *security* and *stability* of value. Whenever their value begins to sink, the demand for them for other uses than that of money increases and so prevents the fall from being as great as it otherwise would be. Moreover, this stability of value is further secured by the fact that the annual production of these metals bears so small a proportion to the entire amount in existence. Gold and silver are almost imperishable. The gold in coin and bars and the silver in coin, now existing, were lately guessed to

be worth between sixteen and eighteen hundred million pounds. Compared with this amount, even the present large yearly output of nearly a hundred and twenty million pounds is small. Changes in the value of gold, therefore, so far as these changes are due to conditions affecting the supply, proceed as a rule slowly and gradually. The *high specific value* of the precious metals—that is, their high value in proportion to their weight and bulk—adapts them for use as money because they are thus a convenient store or receptacle of value. On account, too, of high specific value, the cost of transporting them from one place to another is slight, and therefore their value varies little from place to place. Their *durability* and *indestructibility* are also important qualities, while their extreme *divisibility* without loss of value makes it possible to secure a medium of exchange of any desired worth, however small. Their *malleability* renders coinage easy, and this is also helped by their *homogeneity*, by virtue of which one ounce or pound is always just as valuable as any other ounce or pound. Moreover, the metals and the coins made from them are readily *recognisable* on account of their peculiar ring and their other attributes, and are therefore well adapted for popular currency.

Let us now sum up these qualities which are found especially desirable in money: they are (1) *its value as a commodity*, (2) *its high specific value*, (3) *stability of value*, (4) *uniformity of value*, (5) *cognisability*, (6) *durability*, (7) *portability*, (8) *malleability*, (9) *homogeneity*.

Coinage.—When the metals were first employed as a medium of exchange, they passed from hand to hand

in their rough state, as "dust," or in nuggets, and the testing of amount and fineness was left to the parties to the exchange. In course of time, private individuals of note occasionally stamped or otherwise certified as a guarantee of the weight or fineness or both of the metals, and this custom still obtains in some parts of the world. Gradually, Governments assumed the work of providing an authorised currency, and systems of regular coinage were developed. In attempting to improve the coins, they have sought first of all to prevent counterfeiting by making the coins of regular and uniform sizes, and by various devices, such as elaborate designs upon the face, milled edges, etc. In all this, Governments, although they do not give the original value to the money, increase its value, by the superior exchangeability which their certificate or guarantee confers.

When the Government at its mint coins for private persons any metal they may bring, the coinage is said to be *on private account* or *free coinage*. The expression "free coinage" does not necessarily refer to the cost of coining. If the Government coins for private persons *without charge*, coinage is not only free but also *gratuitous*. Any charge by the mint for coinage is called *mintage*. If the charge is just sufficient to reimburse the Government for the expense of the work, it is named by the French word *brassage*; anything in excess of such a charge is then called *seigniorage*. When the Government buys the metal in the market at the market price and coins it, the coinage is said to be *on government account*. If the face value of the money thus coined exceeds the market value of the metal by more than the expense of coinage, the

difference constitutes another form of seigniorage. Most industrial nations now coin gold on private account and silver on public or Government account; in other words, under such Governments there is free coinage of gold, but not of silver. In England the coinage of gold is also gratuitous.

Governments and Money.—From the fact that Governments *regulate* the coinage of money, the erroneous idea has grown up in the minds of many people that Governments *make* money. As we have seen, all the functions that render money what it is can be fulfilled and have been in fact fulfilled without the participation of Government at all. Governments, therefore, do not “make” money. But by careful coinage to prevent counterfeiting, by stringent laws against fraud, and by conferring the power of legal tender upon the medium of exchange, Governments have done much and can do much to increase the currency or exchangeability of money, and hence may give to a certain volume of money a value much increased. Gold and silver would have a considerable value to-day for use in the arts and for ornament, even if they were not employed as money. They would have a very high value as commodities and as money, even if the Government should leave the work of coinage and the enforcement of debts to private honour. But it cannot be doubted that gold and silver to-day have a higher value than they would enjoy in either of the two cases just assumed.

Prices and the Value of Money.—It is clear, from what has been said concerning money as a measure of value, that a change in the value of the monetary unit means a change in the general prices of other com-

modities. To say that a pound has become cheaper is the same as saying that prices have risen ; *i.e.* it takes more pounds to buy the same commodity. Again, any cause that lowers prices thereby raises the value of money. In brief, prices and the value of money vary inversely.

Prices and the Quantity of Money.—When prices are high, it is evident that a larger volume of the medium of exchange is needed, the rapidity of circulation remaining the same, than that required when prices are low. When coats are £4 apiece, it takes a greater quantity of the medium of exchange to buy them than when they are only £2. This is a fact about which there is no dispute. But it is a distinct and hard question whether an increased supply of money can by itself make prices high, or whether it is the high prices that call forth the increased supply.

The Value of Money.—One of the most difficult and most disputed problems with regard to money is the determination of its value. One answer to the problem, known as the “quantity theory,” has been generally accepted for more than a century ; but in the last few years this theory has been vigorously combated, and it does not now perhaps receive the general or the full assent to its validity that was formerly accorded.

The Quantity Theory.—It is not easy to state the theory briefly and at the same time accurately, but it may be thus expressed : The value of money, and therefore *general prices*, will vary according to the proportion between the demand for money and its supply. By the demand for money is meant the number of exchanges to be effected by the use of money. When trade is very brisk, a great many commodities will be produced and exchanged, and to complete the necessary exchanges society will need a great deal of money ; in other words, the demand for money will be

great. By the supply of money is meant the quantity of money taken in connection with the rapidity of its circulation. Thus, if money circulates on the average more rapidly in one country than in another, a given quantity of money present in the first will result in a greater supply than in the second. Now, according to the theory, if the supply of money remains the same during any period of time, while the demand for money increases on account of the enlarged volume of business, a given quantity of money will exchange for a greater quantity of other goods than before. In other words, the value of money will have risen, and, what is the same thing, the value of commodities, measured in terms of money, will have fallen. Conversely, if the general state of business during any period of time remains the same, while the supply of money increases, either through an increase in quantity or through an increase in the rapidity of circulation, the value of money will fall and general prices will rise. To proceed a step farther, we may say that, if the demand for money at any time increases faster than the supply, the result will be a rise in the value of money and a corresponding fall in general prices; while, if the supply of money increases faster than the demand, there will be a fall in the value of money and a corresponding rise in general prices.

The Value of Money and the Cost of Production.—Finally, it should be added, the theory holds that, in the long run, the value of money *is influenced by* the cost of production of the precious metals. Dear money and cheap goods, it is said, will make mining cheaper and more profitable, and hence will tend to increase the output of the precious metals. Conversely, cheap money and dear goods will lessen the incentive to mining, and hence will tend to decrease the supply of the monetary metal or diminish its rate of increase.

Qualifications.—Certain qualifications of the theory call for special comment. All transactions are not effected by the agency of money. Barter still plays a small part in the work of exchange, and, if the amount of money should

become very small, barter would increase. Credit, with its substitutes for coins, and even for the notes discussed below, tends to play a larger and larger part in exchanges, and must, therefore, be taken into account in estimating the demand for money. When these facts are borne in mind, and when it is further remembered that the theory itself involves so many considerations bearing not only upon the quantity of money and the rapidity of its circulation, but also upon the utility of other goods and the cost of their production, it will be seen that any conclusions based thereon must only be accepted with the greatest caution.

General Prices and Prices of Individual Commodities.—It is to be particularly noticed that we have spoken of *general prices*. There is nothing in the theory that would be inconsistent with an increased demand for money coinciding with a rise in the value of some other commodity or group of commodities. It is always happening that, while general prices are rising or falling, the value of some commodities is moving in the opposite direction. Even though the quantity of money were diminished very greatly and very rapidly, the difficulties of producing some other commodity might increase more than in proportion, with the result that the value of that commodity, measured in terms of money, would rise instead of fall.

Paper Money.—Hitherto we have been speaking especially of coins or metallic money. Another form of money which is employed extensively in modern times is paper money. That generally consists of written promises to pay on demand, given by banks or by the Government. People take these promises to pay and use them as money, because they believe that the promise will be kept ; or because they think that others will receive them without question ; or because they know that the notes, having been made legal tender, must be accepted in payment for debt unless

otherwise expressly stipulated by contract ; or because, as is the case with most kinds of paper money, such bills or notes are receivable for taxes. Where confidence in paper money is complete, such money is often preferred to metallic money, because it is more convenient.

In England the paper money, which has been in circulation during the last half-century or so, has consisted for the most part of notes of different values (mainly of £5 or £10) issued by the Bank of England alone. These are, as it is said, "convertible" on demand into gold at the Bank (*i.e.* they can be taken at any time to the Issue Department of the Bank, and gold can be obtained in exchange for them). But in other countries, and at different times, several varieties of paper money have been issued, some of which, though "inconvertible" and not exchangeable on demand for gold, have yet been made "legal tender."

Inflation and Contraction.—When the supply of money is increased to such an extent that prices are generally affected, there is said to be an "inflation" of the currency. On the other hand, when the supply of money, relatively to the demand, decreases to such an extent that prices in general fall, there is said to be a "contraction" of the currency. Inflation and contraction of metallic money have both occurred on a large scale in the world's history, and there is nothing to prevent a recurrence of the same trouble in the future. Such contraction or inflation is held to be *natural*, because it depends upon the natural conditions surrounding the supply of the precious metals. But Governments may also create the evil of inflation

by issuing paper money in excessive quantities. In such a case the inflation is *artificial*; and this is the peculiar risk which attends inconvertible notes.

Inflation of the currency, whether natural or artificial, does injury to large classes of persons. All those in receipt of incomes fixed and slowly changing, and all persons having money due to them on contracts stretching over a long period of time, find their purchasing power lessened beyond reasonable expectation. In a sentence, we may say that *inflation brings an undeserved injury to the creditor class in the community. On the other hand, contraction works a similar injury to the debtor class.* During periods of falling prices, due to such contraction, men who have entered into business engagements on borrowed capital find that the goods they have to sell, on the profits from which they must depend for the repayment of the borrowed capital, are constantly falling in their price, and so if they return the amount of their debt in money they will really be repaying a much greater amount of general purchasing power.

If inflation is injurious to creditors, and contraction is harmful to debtors, it is equally true that inflation confers an advantage upon debtors and that contraction bestows a similar advantage upon creditors. Such being the case, it is perhaps not surprising that there should at times be many who ask for the intervention of Governments to change the level of prices by a change in the amount of money. If artificial contraction could be produced as easily as artificial inflation, it is possible that the creditor classes in the community would occasionally appeal to Governments for the advantage which would accrue to them in their

turn from such a policy. As it is, such appeals come in fact rather from the debtor class.

The Evils of Artificial Inflation.—Some of the dangers resulting from artificial inflation call for further comment. It is easy to set the printing-press to work, and to issue money in unlimited amounts. This is *apparently* a course much easier than taxation as a means of paying the expenses of a government, and the temptation to pursue this plan has often promoted waste and extravagant expenditure. Moreover, only a limited amount of such money can be kept in circulation at its *nominal* or *par* value. The depreciation which results from issuing paper money beyond this limit produces great inconvenience and suffering, for, according to a law known as Gresham's Law, *inferior money regularly drives better money out of circulation*. As a result, prices rise. The rise of prices diminishes the value of all fixed incomes, of interest payments on all debts, and of wages. Inflation of this sort is also a great inconvenience in international trade, because one nation does not recognise the legal tender character of another nation's paper currency, and foreigners lose faith in paper money which is not kept at par with the precious metals. Governments can keep their paper money at par by redeeming it in gold whenever gold is demanded. In such cases paper money is said to be *redeemable* or *convertible*. Redeemable paper money cannot be over-issued, and, as it has some clear advantages over metallic money, it is in many respects a good form of money. Irredeemable or inconvertible paper money, by contrast, may be said to be indisputably bad. Under these circumstances it is evident that Governments should

issue no paper money unless they are quite sure that such issues will not lead to dishonest inflation.

CHANGES IN THE AMOUNT OF MONEY : BIMETALLISM

The Amount of Money Needed.—The question has often been asked, How much money does a country need ? And the answer has sometimes been returned : “ It makes no difference how much money there is. If the supply is abundant, prices will be high ; if the supply is small, prices will be low and the same amount of money will go farther. A little money will do the work as well as a large supply.” It is true that there is a relation between the supply of money and its value, although this relation is, as we have seen, by no means simple, but, on the contrary, extremely intricate ; and it is true that, other things being equal, large supply means small value per piece, and small supply large value ; but the conclusion which was drawn from these facts in the answer quoted does not follow from the facts themselves. When the amount of money is small, barter is extensively practised, with resulting loss and inconvenience to trade. There should certainly be a stock of money sufficient to effect all the ordinary transactions of life for which credit instruments are not readily available. Now, one of the most common business transactions is the payment of wages, and money should therefore exist in such quantities that it will not be too valuable to use for that purpose. In other words, the supply of money should be great enough to make the value of a coin of convenient size not greater than the value of the day's wages of an unskilled labourer. It is even

desirable that money should be still cheaper, so that the earnings of such a day's labour may be divided into parts. It is not, however, necessary that money should be cheap enough to enable us to make our smallest purchases with full legal tender money, since, in addition to money of this character, all countries have subsidiary coins, like our fractional parts of a pound, our silver crowns, half-crowns, florins, shillings, and sixpences, and our bronze pence and half-pence and farthings, which are legal tender only for small payments. These subsidiary coins contain less than the proportionate amount of pure metal. The silver coins are legal tender for amounts no greater than £2, and the bronze for sums no larger than a shilling. Such subsidiary coins are known as "token" coins because they pass at a "conventional" or agreed value, and do not contain metal of the value stated on their face.

Fluctuations in the Volume of Money.—The grounds just given for requiring a certain amount of money are not the only considerations of importance in determining how much a country needs. Provided the above requirement has been satisfied, it may make little difference whether the amount of money at any one time be large or small, but it does make a great deal of difference, as we have shown in discussing inflation and contraction, whether the amount of money remains the same or increases or decreases. It is not the "much or little," but the "more or less" that counts. Obligations have been made in the past which must be met in the present or the future. Now, to decrease the amount of money, other things remaining the same, raises the value of every debt and adds to the burden of every debtor. It increases

the value of mortgages, and bonds, and the pressure of local and national indebtedness. It enriches the few at the expense of the many.

We must not forget, however, that the quantity of money is by no means the only factor in determining the value of money. So many forces are present in settling general prices that any conclusion based solely upon the relation between the quantity of money and its value must be accepted with the utmost caution. Thus in our day credit and the documents used for its purposes are becoming more and more important instruments of exchange, and we must remember that whatever impairs confidence so reduces the volume of credit and credit instruments that it causes stringency in the money market, and thereby raises the "value of money."

Bimetallism.—Our discussion of the amount of money needed by a country brings us naturally to the question of *bimetallism*, which was eagerly debated not very long ago. To institute a system of bimetallism, three things are necessary : *the use of two metals, free mintage of both at a fixed ratio, and the recognition of both as legal tender*. Silver and gold have both been in general use as money, and some governments have fixed at what ratio the two should be coined. A ratio that has been commonly employed in the past is $15\frac{1}{2}$ to 1, which means that in full legal tender coins under such a system one ounce of gold is treated as equal in debt-paying power to $15\frac{1}{2}$ ounces of silver. This was once the general European ratio.

The Latin Monetary Union.—The ratio was maintained with free coinage of both metals for about seventy years during the nineteenth century by the

action, first of France, and then of a combination of countries, called the *Latin Monetary Union*, in which France, Belgium, Switzerland, and Italy were most prominent. Under their system, every one who had gold or silver in any form could have it changed to money at the established ratio of coinage.

Demonetisation.—About 1873, however, Germany, which had before given free coinage to silver alone, decided to change to a gold basis, and threw upon the markets of the world an immense amount of silver at the same time that she increased the demand for gold. In the same year, the United States of America dropped the silver dollar from the list of coins to be struck at the mint, and thus adopted gold monometallism, although, as a matter of fact, no silver dollars had been coined for years. On account of the rapid decline in the value of silver, the Latin Union also soon suspended its free coinage. To add to the confusion, large discoveries of silver about the same time brought a great and rapid increase of the supply. The result of these changes was a violent fluctuation from the old market ratio between the two metals, silver falling so much in value as measured by gold that it required about thirty-eight ounces of silver to purchase one of gold. In other words, the market ratio changed from the old mint ratio of $15\frac{1}{2}$ to 1 to a new ratio of about 38 to 1.

Results of Monetary Changes.—The changes which we have described naturally raised the value of money, and thus incidentally of all debts, and produced great disturbance or distress. But this increase in the debts was only a part of the resulting inconvenience. South America and the Oriental countries

being on a silver basis, trade had easily been conducted with them as long as gold and silver readily exchanged for one another at an established ratio ; but when the ratio began to fluctuate, an uncertain and disturbing element was introduced into trade, rendering it highly speculative, and therefore on the whole less profitable to the world. The merchant in Liverpool who sold goods to a merchant in India would agree to receive in exchange a fixed sum of silver money ; but, as it was necessary for the English merchant to exchange this silver for gold, a fall in the value of silver during the progress of the transaction might bring bankruptcy to him. Under these conditions the exportation of manufactured goods to the Orient was impeded, and to the same extent production in India and China is believed to have been artificially stimulated. India was, however, driven to the adoption of some monetary expedient which would in effect put and maintain her on a basis of stability in her exchanges with gold-using England.

These, in brief, are some of the difficulties that are thought by many to have resulted in a great measure from the general demonetisation of silver which occurred. Bimetallism was advocated as a remedy. Under bimetallism the Government would receive at a fixed ratio all gold and silver that anybody desired to have minted ; in other words, the Government would coin gold and silver on private account. Bimetallic coinage by one country alone is called *national bimetallism*. It was, however, generally agreed among economists that national bimetallism had become impracticable, because, according to their view, no country commercially was powerful enough to furnish

such a demand for both metals as would be necessary to maintain their parity of value at any coinage ratio that was proposed. If, on the other hand, the proposed ratio could not be maintained, then other countries might send to it all their silver and take away its gold, by the simple action of Gresham's Law, thus practically reducing that country to a silver basis.

With *international bimetallism*, however, which meant bimetallism based on an agreement like that of the Latin Monetary Union before 1874, the case was, it was held, quite different. Economists were at the time inclined to favour such a monetary policy, and even to-day there remain in Europe and America some few economists who believe such international action to be still both feasible and desirable. They believe that if, for instance, England, the United States, Germany, and France should enter into such an agreement, those countries could maintain the ratio. Such international bimetallists remind their followers that gold and silver are used principally for money, and that owners of gold and silver would be obliged by the international agreement either to have the metal minted at the government ratio, or to sell it in the market for use in the arts. But the arts absorb no more than a portion, relatively small, of the annual product, and a portion very much smaller of the total supply existing. It has therefore been contended that Governments are in the position of monopolists, and by agreement could maintain a fixed mintage ratio. Moreover, these international bimetalists declared that as a result of such action greater justice would be done both to creditors and debtors,

and that the world's business would be increased on account of the greater convenience of commerce between gold-using and silver-using countries.

RECENT MONETARY HISTORY. OTHER SCHEMES

A. In the United States.—No great nation now coins both metals freely, but the government of the United States, as well as others, still provides a place for silver in its currency. By two Acts, the Bland-Allison Act of 1878, and the Sherman Act superseding it in 1890, provision was made for the purchase of silver in certain quantities every month, and silver certificates were issued based upon the metal bought. But the object of these Acts was not secured, and silver continued to depreciate in value. When the Indian mint was closed to free coinage of the metal, the declared price fell within three days by nearly a fifth of its former value. In 1893, after a bitter fight, the purchasing clause of the Sherman Act was repealed, and in 1900 the gold dollar became finally the standard of value in the United States, all other kinds of money being henceforth maintained at a parity with gold. With reference to silver coinage, while silver dollars or silver certificates representing them were to be coined and used in the redemption of the notes issued under the Sherman Act, silver was to become eventually of a subsidiary character in the monetary system, and the position of the United States as a country of gold monometallism was confirmed.

B. In Other Countries.—The strong desire for international bimetallism felt both by economic theorists of repute and by practical statesmen in many lands

led to repeated monetary conferences, which usually received the vigorous support of the United States. The most noteworthy of these were the Paris Conference of 1878 and the Brussels Conference of 1892 ; but nothing came of these expert discussions. Inertia and the quiet opposition of a great part of the business world were more potent than the activity of the bimetallists, and England may justly be declared to have opposed all plans for international action, in spite of the difficulty experienced after 1874 in the exchange with her dependency India. France and the countries of the Latin Union continued to regard both metals as legal tender, but continued also their suspension of the free coinage of silver. Their system was described appropriately as "limping" or "halting" bimetallism, as the bimetallism which they observed rested on only one of the two supports considered necessary for its effective maintenance.

Whatever indeed we may think of the economic arguments of the international bimetallists, and they have certainly contributed to the development of monetary theory, the monetary history of the last twenty-five years seems to show conclusively that international bimetallism has lost rather than gained in favour ; and therefore those who support the notion, recognising the hopelessness of reaching their ideal, may well unite with their former opponents in securing the best monetary system that now has a reasonable chance of being realised.

C. In India.—Such an improvement on our present arrangements has drawn, curiously enough, some arguments in its favour from the system which, by accident rather than deliberate intention, has become

established in British India. The economist Ricardo, an acknowledged authority on monetary questions, put forward in the early part of the nineteenth century proposals for what he styled a "secure" and "economical currency." His plan was this. Without the actual use of gold in the shape of current coins, paper money might be preserved at a parity of value with uncoined gold, kept in the Bank and used for international payments alone. The currency would be thus, he held, at once cheap or "economical," and it would consist of inexpensive material and save the "wear and tear" of metal; and it would be "secure," because its value would by the means he recommended be kept equivalent to the gold automatically moving into and out of the country. In effect the present Indian monetary system has realised this aim. It has been called a "*gold-exchange standard*." The distinct intention of its original introducers was to avoid those difficulties of exchange between silver-using India and gold-using England, which had followed the breakdown of bimetallism, by establishing gold-monometallism in the eastern country in the precise shape in which it had long been recognised in the European country. They certainly contemplated the eventual circulation of gold coins in India. But as a transitional measure, which was viewed with distrust by its opponents, and approved half-heartedly even by its friends, they transformed the current Indian coin, the silver rupee, into an inconvertible token to be maintained at a fixed parity with gold. With this end in view, they agreed to give rupees at a certain value in exchange for gold, and, although they did not enter into any formal undertaking, yet, in effect, they have also

guaranteed to provide in London gold at the same value (of 15 rupees for the sovereign) in exchange for rupees. To ensure this dual provision, they must have at their command a sufficient sum of rupees and gold. Owing to the circumstances of trade between India and the world, the Indian Government has been enabled to control and influence the exchanges between England and her Oriental dependency in such a way as to prevent this parity of value, once it has been established, from being seriously menaced or disturbed. And thus India, with an "economical" currency, with which she was familiar, of silver rupees, has been enabled to achieve "secure" stability of its exchange with gold, without incurring the expense of gold coins. A device, originally considered a temporary and not very satisfactory expedient, now seems likely to be permanent. It has been approved by a recent Royal Commission.

D. A Stable Monetary Standard—In Austria-Hungary the parity of the paper currency with gold has within recent years been preserved by similar means to those thus pursued in India, of manipulating the exchanges. And the idea has been put forward that the device might be extended in a way which would make the monetary standard approximate more closely to the desired stability which is attained, for instance, in a measure of length like a yard, or of capacity like a pint or quart. Everyone allows that a "standard" should be steady in its value; and it is also generally admitted that the value of gold in relation to commodities alters appreciably from time to time owing to changes in the output of the metal from the mines. During recent years the annual output has grown enormously until it has reached about one hundred

millions of pounds, compared with a figure that at the time of the bimetallic debate was about a fourth of this sum. It is natural, or indeed inevitable, to conclude that gold prices have risen, and that the value of gold itself has fallen. But it has been ingeniously suggested that the gold so generally employed now as the basis of a monetary system in this and other countries might be adjusted to alterations in the value of the metal in such a way as to preserve a parity with a more stable standard resting upon an average of prices. If the value of gold was falling, as it is at present, such a change would be shown in the "index numbers" (as they are called) constructed by scientific statisticians to show the changes in general prices or the alterations in the purchasing power of gold; and, by a compensating variation in the amount of the metal put into the coin or bar used as the basis of a monetary system, the standard might be made more stable than it is at present. Such a scheme of a varying seigniorage has been recently advanced by Professor Irving Fisher. Its feasibility is suggested by the Indian experience we have noted: its desirability would seem to recommend its careful consideration to bimetallicists and their opponents.

SUMMARY

1. Money serves as a medium of exchange, a measure of value, a standard of deferred payments, and a store of value.
2. The precious metals have certain desirable qualities that have given them the first place for money use.
3. Governments do not create, but they do increase the value of money.

4. The general theory of competitive value applies to the value of money, or general prices.
5. Stability, the great desideratum in money, is opposed to inflation and contraction.
6. Bimetallism has been advocated as a policy to secure stability ; but the recent tendency has been away from bimetallism to gold monometallism.
7. Later monetary experience has suggested possible new improvements in the direction of giving stability to the gold standard

QUESTIONS

1. Name the qualities desirable in money. Mention different things that have been used as money.
2. What is coinage ? Free coinage ? Gratuitous coinage ? Brassage ? Seigniorage ?
3. Discuss the relation of Governments to money.
4. Discuss the " quantity theory " of the value of money.
5. What are the advantages of paper money ? Its dangers ?
6. What are the evils of inflation ? Of contraction ? How much money does a country need ?
7. What is bimetallism ? International bimetallism ? What was the Latin Monetary Union ?
8. What is the " gold exchange standard " ? Could greater stability be secured with gold monometallism, and by what means ?

LITERATURE

- W. S. Jevons' *Money and the Mechanism of Exchange*.
 J. S. Nicholson's *Money and Monetary Problems*.
 F. A. Walker's *Money and Money, Trade, and Industry*.
 H. Withers' *The Meaning of Money*
 A. de Foville's *La Monnaie*.
 J. M. Keynes' *Indian Currency and Finance*.
 F. A. Walker's *International Bimetallism*.
 W. S. Jevons' *Investigations in Currency and Finance*.
 Irving Fisher's *The Purchasing Power of Money*.

CHAPTER V

CREDIT AND BANKING

What Credit Is.—We have seen the immense development in exchange that has been made possible by means of money,—a development resulting in the division and organisation of labour and a revolution of our economic life. Yet the use of money as a medium of exchange is an inadequate explanation of the magnitude of present commercial intercourse. Great as is its advantage over barter, money is too clumsy an instrument for many modern purposes. While it is by no means discarded wholly at the present time, money is primarily characteristic of the economic stage preceding that in which we live. The characteristic instrument of exchange in our own day is not money, but credit.

Like other terms which Economics borrows from the language of everyday life, the word “credit” has many meanings and shades of meaning. One of the commonest of these is indicated when we say that a man’s “credit is good” or that he has “good credit.” By this we understand that he enjoys the reputation of paying his debts and has the ability to do so, and that therefore other men are willing to sell him goods and to wait for payment until a future date. Another

important meaning of the word refers to the character, not of the man, but of the transaction. The transfer of goods with the expectation of future payment is a "credit transaction." This is the idea which we embody in the word "credit" in the science of Economics. We may therefore define the term as follows : *A credit transaction is a transfer of goods for a promise of a future equivalent.* Now, it should be noticed that the transaction is partly present and partly future, or, in other words, credit contains an *element of time*. In the second place, it is to be remarked that the affair involves *confidence* either (a) in the *character and resources of the borrower* or (b) in the *sufficiency and security of goods* which he may have *pledged* for the fulfilment of his promise. A third factor frequently present is *written evidence of indebtedness*, given by the borrower to the lender. This writing constitutes the *instrument of credit*.

The Mechanism of Credit.—The mechanism of credit, or the machinery by which credit operations are conducted, consists of two parts : (I) the *instruments of credit*,—the evidences of indebtedness,—such as cheques, drafts, notes, bonds, etc. ; and (II) the *institutions of credit*, comprising principally banks and clearing-houses.

I. Instruments of Credit.—Among the instruments of credit the simplest and most familiar form in this country is the (1) cheque. *A cheque is an order upon a bank by an individual or company requiring the payment of a certain sum of money to the order of a person named or to the holder of the cheque.* In this form of credit the element of time plays no considerable part. If money were paid instead of a cheque, the

person receiving that would probably deposit it in a bank. Taking a cheque, he carries it to the bank. The element of credit here prominent is the trust or confidence involved, the belief that the cheque will be honoured by the bank upon which it is drawn.

Bankers also use cheques. When one banker gives a cheque on another, the instrument is sometimes known as a (2) *draft*. Another form of draft arises when a bank or a company or an individual orders the payment of a sum of money to a bank. When, however, the drawer and the drawee of a draft live in different countries, the instrument is often called a *bill of exchange*. Both terms, however, are used so loosely and with such variation that the reader must judge a writer's meaning from the context.

A third form of instruments of credit consists of (3) *notes*, which are usually *promises to pay a certain sum of money for value received, under conditions named, on demand, or at the expiration of a certain period*. Here the time element is important, and in some cases we observe that interest is paid. Such notes are of three general kinds, according to the character of the issuer.

- (a) Individuals and companies give *promissory notes* for payment on demand or within a certain time.
- (b) Banks in most countries supply notes which commonly pass as money and have a different legal standing from that belonging to the promissory notes of individuals. Such are the notes of the Bank of England.
- (c) Governments themselves, as distinct from the banks which they specially recognise or employ, often issue notes, and we have already discussed these and bank notes in treating of the subject of paper money. Bank notes and government notes do not usually bear interest.

The "goldsmiths' notes," which were an early form both of paper money and of credit instruments in England, seem at first to have represented actual stores of coin which had been deposited. They were orders to pay, in the case of cheques given by customers for odd amounts, and, in the case of notes, issued by the goldsmiths themselves for round sums. It was only in the course of time that the essential feature of modern banking came into prominence, and the goldsmiths used the deposits for loaning purposes and did not profess to keep them intact ready at all times for full return, but guaranteed alone to meet claims as they arose.

Ordinary instruments of credit do not circulate freely like money, but are intended to be used primarily in one transaction. Yet they are by no means confined to this ; and cheques and bills often pass through many hands, while promissory notes are often transferred once, twice, or many times. With bank notes and government notes, however, which circulate as money, the case is quite different. These are (1) intended for general use ; (2) they are always drawn to bearer ; (3) they are issued in fixed and convenient denominations ; and (4) the credit of the issuing agent is usually taken as a matter of course.

Credit transactions between individuals usually assume one of the two following forms : (1) generally a person buying goods promises to pay the person from whom the goods are bought ; but, instead, (2) the seller may "draw on" the buyer by means of a *bill of exchange* which in such cases is also sometimes called a *draft*. Let us suppose that A is the seller and B a buyer in a distant place. A writes an order upon B

to pay to him or to a third party, C, the amount of the debt. If B on receipt of the order acknowledges the debt and is ready to agree to pay, he writes *accept* on the bill and signs his name. This act is called an *acceptance*. The instrument thus becomes legally binding upon the acceptor.

Cheques and promissory notes may be *transferred* by *indorsement*. The payee, by writing his name on the back of the instrument, orders the payment of the money to another person whom he names in writing. By thus indorsing the instrument, he becomes responsible for its payment in case the man who precedes him in responsibility fails to make the payment. The person to whom such an instrument is indorsed, or the *indorsee*, may also in turn become an *indorser*, and he then also assumes similar responsibility.

Book credit (4) is another form of credit which is used extensively, especially in retail trade. When goods are sold, a record is kept, or, as we ordinarily say, the goods are "charged," a bill for the amount being sent at a later time. Where two persons mutually grant book credit, as is often the case among merchants in small places, only balances need be paid in money on the settling day.

II. *Institutions of Credit: Banks and Clearing-houses.*—Bankers have been already mentioned as middlemen in credit transactions. They are sometimes called dealers in credit, and indeed there is little that they do which is not in one way or another connected with credit. But banks are more than agents. They have a capital of their own which serves as a guarantee fund, and they receive money which customers deposit with them. Under certain

conditions they mingle the deposits with their own capital and have exclusive control over all. They at once are debtors to their depositors, and creditors of those to whom they lend money. Their source of profit is not entirely nor even chiefly their own capital, but rather the funds deposited with them. As a rule, ordinary banks either pay no interest on deposits or they pay this at a rate considerably lower than that charged on money loaned. The difference constitutes their chief source of profit.

In earlier times nearly all banks issued notes which circulated as money. In fact, such note issues were commonly regarded as the principal duty of the banks. Now, under the Bank Charter Act of 1844, only the Bank of England and a few surviving country banks issue notes in England, and, whenever the latter dissolve partnership, the privilege terminates. In nearly all civilised countries indeed, the power of banks to issue circulating notes has been greatly restricted, and the number of banks that find a source of profit in such issue is constantly diminishing. The Bank of England itself cannot issue more than the amount fixed in 1844 as likely to remain in constant circulation and two-thirds of the lapsed issues of the country banks without depositing gold in the cellars of its Issue Department.

It would take us too far afield were we to enter upon a complete discussion of the various kinds of banks and their precise differences. Briefly, we may say that any institution which (a) *discounts* bills or other forms of commercial paper, and (b) *receives and holds deposits*, is a bank, whether or not it issues notes. Savings banks are therefore not banks in the full sense of the word, for they do not discount bills. The

three classes of regular banks in England are the Bank of England, which is at the centre of the banking world ; the Joint Stock banks ; and private banks. The last class is dying, and there has recently been a marked tendency to the amalgamation of separate institutions into huge companies transacting an immense business through numerous branch offices. Their general rules, perhaps, make it less easy than before for enterprising traders to receive the initial help to start or enlarge a business from monied men possessing personal and local knowledge.

The nature of banking operations will be made clearer by an examination of the following specimen of the Statement of the Bank of England published week by week :

FOR THE WEEK ENDING THE 8th JULY, 1914

ISSUE DEPARTMENT

Notes issued -	£56,908,235	Government debt -	£11,015,100
		Other securities -	7,434,900
		Gold coin and bullion	38,458,235
		Silver bullion -	—
	<hr/> £56,908,235 <hr/>		<hr/> £56,908,235 <hr/>

BANKING DEPARTMENT

Capital -	£14,553,000	Government securities -	£11,005,126
Rest -	3,431,484	Other securities -	33,623,288
Public deposits ¹ -	13,318,714	Notes -	27,592,980
Other deposits • -	42,485,605	Gold and silver coin	1,596,419
Seven-day and other bills -	29,010		
	<hr/> £73,817,813 <hr/>		<hr/> £73,817,813 <hr/>

¹ Including Exchequer, Savings Banks, Commissioners of National Debt and Dividend Accounts.

To this we may add the balance sheet issued by a firm of bankers to its customers on the 17th July, 1914, showing the certified condition of their assets and liabilities on the 6th of that month.

<i>Dr.</i>											
			£	s.	d.		£	s.	d.		
To Amount due by the Bank on											
Current Accounts - -			2,100,718	15	10						
„ Amount due by the Bank on											
Deposit Accounts - -			652,034	6	0						
							2,752,753	1	10		
Capital and Reserves - -			-	-	-		485,000	0	0		
							£3,237,753	1	10		
						<i>Cr.</i>					
			£	s.	d.		£	s.	d.		
By Cash on hand and at Bankers			492,704	0	8						
„ Cash at call and short notice -			496,000	0	0						
							988,704	0	8		
„ Exchequer Bonds and other securities - -			-	-	-		719,513	9	3		
„ Loans, Overdrafts and Bills discounted - -			-	-	-		1,429,535	11	11		
„ Freeholds - - - - -			-	-	-		100,000	0	0		
							£3,237,753	1	10		

In these accounts we should notice first the separation between the Issue and the Banking Department of the Bank of England. This was made in pursuance of the Act of 1844. A *fiduciary* issue, as it is called, is allowed. That is guaranteed in the main by the debt of the Government to the Bank, with which this institution originated in 1694, when the novel device of Paterson for raising a needed loan for the unstable government of William III. without the unpopular expedient of taxation, took the happy form of granting the lenders banking privileges. It is also guaranteed by "other securities," and it amounts now to some

eighteen million pounds. That sum, it is supposed, will always remain in circulation, and never be presented at the Bank for payment. But beyond that figure any additional issue can be made alone against gold, and, to a limited extent, against silver. The Banking Department, by contrast, carries on the ordinary business of a banker, receiving deposits and discounting bills. But the "public deposits" are, in the case of the Bank of England, a distinguishing characteristic. To meet its liabilities, the Bank of England, like the other bank of which a balance sheet is given, has a certain amount of recognised legal tender, represented for the most part by notes and, in a much smaller proportion, by gold and silver coin. The remainder of its assets consists of securities, of which a quarter are in this instance "government securities." In the other example quoted the "cash on hand and at bankers" and "the cash at call and at short notice" are not much more than a third of the amounts due on current and on deposit accounts. The "cash at bankers" is probably at the Bank of England, which in its central position in the banking world keeps the cash reserve of the other banks. In both instances we note that bankers use in the conduct of their business not merely their original capital, but also the deposits made with them by their customers. In both instances, too, we may observe that the business which is suited to their position is one of which the turnover is comparatively rapid. The assets of a bank should be "liquid," and bill-discounting presents this characteristic in a marked degree, for the bills are constantly maturing and run for short periods alone. The banks give to the drawers their "present worth."

Clearing-houses.—Clearing-houses were originally contrived by the employees of banks with the object of saving time and labour. Banks in a city have continual dealings with one another. A regular customer of a bank deposits with it all the cheques that he receives, no matter on what bank they may have been drawn. It therefore happens that every bank in any of our cities receives cheques every day drawn on the other banks, while the other banks receive cheques drawn on it. Formerly there was continual running to and fro among the banks to balance their accounts. Now the representatives of all the banks in large provincial cities such as Liverpool meet daily in a clearing-house and exchange their obligations, and the differences between the sums due are alone paid. These are paid by the debtor banks to the clearing-house, and by the clearing-house in turn to the creditor banks.

Clearing-house statistics show the inadequacy of money to conduct the business of the modern industrial world. The total transactions of the bankers' clearing-house in London in 1911 amounted, as we have noticed before, to £14,613,877,000, or many times as much as all the money in the country, bank notes included. The small proportion of actual money transfers used in paying the clearing-house balances would demonstrate the same truth. The average daily amount "cleared" in London increased from 29 million pounds in 1900 to 40 millions in 1905, but the actual money passing was, we may be sure, not proportionately increased. In fact, drafts on the Bank of England are employed to settle the balances due.

The Advantages of Credit.—It remains to state in separate paragraphs the advantages and evils which

attend the great development of credit in modern industrial society.

1. *Credit saves time and labour* by furnishing a more perfect and convenient means of payment in large sums and between distant places than that supplied by the precious metals. Thus, in international trade, relatively small sums of money have to be sent from one country to another, as balances alone are paid in money. If certain London merchants owe New York merchants £1,000,000 for cotton shipped, while the same or other New York merchants owe the same or other London merchants £1,000,000 for importations from Europe, it is obvious that no money need leave either country. The London merchants may send orders to their New York debtors to pay their New York creditors. This is the simplest kind of cancellation of indebtedness. In actual life, the process is more complex, but the underlying principle is the same. New York merchants owe London merchants; Paris merchants owe New York merchants; London merchants owe Paris merchants, etc. By exchanging orders among the different debtors and creditors a large part of the total debts may always be paid without the shipment of money.

2. *Credit saves capital* by taking the place of corresponding amounts of gold and silver. In this way society is enabled to employ a larger portion of the precious metals for other useful purposes.

3. *Credit renders capital more productive.* Under our credit system he who possesses capital, but is unable to use it, may transfer it for a compensation to another person who can employ it productively, and thus both debtor and creditor, as well as the public generally,

are benefited. Other things being equal, capital is loaned to those who will pay the most for it, and under normal conditions these must be those who can employ it most productively. There are evidently two sides to this advantage. On the one hand, as we have just said, credit enables those who have capital, but are without the disposition or ability to use it productively, so to place their capital that they themselves receive benefit while furthering social production. On the other hand, credit enables those who have great business qualifications, but have inadequate capital or no capital at all, to employ their energies and talents for their own benefit in furthering the welfare of society. In many cases credit brings together capital without directive power and directive power without capital, and thus serves to unite capital and labour.

4. *Credit furthers the accumulation of capital* by gathering together the very smallest sums, as, for instance, in savings banks. Such tiny sums, forming in the aggregate large masses of capital, are loaned then by those who are responsible for them to joint-stock companies and other business concerns. In this way the *capital itself is concentrated while the returns are scattered* widely among the people. Moreover, credit furthers the accumulation of capital by promoting thrift, for it both helps and encourages men to provide for emergencies and for old age. This is particularly the case with institutions that supply capital to the poorer classes, and with building societies, which furnish these classes with the means of constructing houses.

Evils of Credit.—But we must not overlook the dark side of credit. Without discussing at undue length

the evils of credit we may mention some of the more important :

1. *Credit frequently encourages extravagance*, which is a fruitful source of fraud and embezzlement. Men who are granted credit frequently transgress reasonable limits, and then in their despair resort to desperate expedients in the hope of escape.

2. *Credit prompts precarious speculation*. Those who speculate with the capital of other people are proverbially careless. The world is strewn with the ruins of enterprise wrecked by men who have mismanaged the property which unwise credit gave into their hands. When such management assumes unusually large proportions, credit becomes a powerful factor in precipitating a disastrous panic and crisis.

Some writers have claimed that all *productive credit*—credit used in carrying on a business—is good, and that the evils of credit arise only in connection with what may be called *consumptive credit*, that is, credit which enables an individual to spend money for personal gratification ; but, while there is a modicum of truth underlying this distinction, the line cannot be thus sharply drawn. Consumptive credit does frequently lead to extravagance, but it also permits many a young man to develop personal powers and to become a great artist or scholar ; while, on the other hand, productive credit, normally resulting in great advantage to society, sometimes puts business at the mercy of ignorance, incompetence, and dishonesty.

We may conclude the matter by saying that we should do all within our power as a society to preserve the advantages of credit, while we try to reduce its evils

to a minimum. It is a hopeful indication of progress in this direction that more and more attention is being given by the public to a demand for full publicity in the management of great business undertakings. Such publicity will go far towards obviating one of the most apparent and most general of the abuses of credit which we have enumerated.

SUMMARY

1. Money having proved inadequate to the needs of modern exchange, credit has displaced it for ordinary large transactions.
2. Credit means the transfer of goods in the present for a promise of an equivalent amount of goods to be repaid at a future time. Hence there are two fundamental elements to be distinguished: time and confidence.
3. The chief instruments of credit are cheques, drafts, and bills of exchange, promissory notes, bank notes, and government notes, and "book accounts."
4. Banks are institutions for facilitating credit transactions; clearing-houses are institutions for facilitating transfers of credit among banks.
5. Credit saves the time and labour involved in money payments; it saves capital, promotes the accumulation of capital, and makes a given amount of capital more productive.
6. Credit often leads to speculation and fraud; it encourages extravagance and waste in public and private consumption.

QUESTIONS

1. What different meanings has the word "credit"? In which sense is it most often used in Economics?
2. In what cases is there but little time advantage in credit? Mention cases in which the element of confidence is very slight.

3. What is a cheque ? A bill of exchange ? A bank draft ?
What is a note ? A bond ? What is the advantage of
a note ? Of a cheque ?
4. What effect does credit have upon the productiveness of
capital ? Why ? Upon the accumulation of capital ?
How ? What connection have these two results ?
5. What are the evils of credit ? How do the evils resulting
to society compare with the evils resulting to indi-
viduals ?
6. What is a bank ? What functions are necessary to the idea
of a bank ? What other function or functions do some
banks exercise ? How do banks reap a profit ? Why is
this proper and legitimate ?
7. What advantages has bank money ? What dangers ?
What is the tendency to-day regarding bank-note
issue ?
8. What is a clearing-house ? What bearing has the work
done in such institutions upon the relative importance
of money and credit in modern industry ? How are
balances paid ? To whom are the balances first paid ?

LITERATURE

W. Bagehot's *Lombard Street*.

J. W. Gilbert's *History, Principles, and Practice of Banking*.

H Withers' *The Meaning of Money*.

CHAPTER VI

INTERNATIONAL TRADE

THE subject of international trade calls for extended study before we leave the question of transfers or exchange. Nations do not live in isolation. More and more with the passing years trade is overleaping narrow local limits and becoming world-wide in extent. International trade in the last analysis is generally trade between pairs of individuals, and in many respects is precisely similar to trade among individuals in a single community or country. But there are certain features in which it differs so materially from trade within a narrower area or within a single political unit that it calls for special treatment.

In the present chapter we shall first study the nature of international trade, and we shall conclude with a discussion of the restrictions, usually in the form of tariff duties, laid by nations upon international commerce.

I. THE NATURE OF INTERNATIONAL TRADE

An Exchange of Goods for Money.—Whenever an individual in one country sells goods to an individual in another, he sells the goods for money just as he

would in dealing with a member of his own community. But owing to the difficulty and risk of sending money to and fro in payment of individual claims resulting from innumerable sales and purchases, great banking houses have developed a system by which the larger part of such transactions is effected without the use of money. The system of international exchange is like that of the clearing-house, which has already been explained. When an English exporter sends goods to an American importer, there are two methods by which payment may be made. More commonly the exporter "draws on" the importer for the agreed amount; that is, he writes an order upon the importer to pay, usually at some specified place, the sum named on the face of the bill. This bill of exchange, attached to a bill of lading of the goods and other documents, the exporter sells to a bank, which thus purchases a right to have a certain amount of money paid at its order in America. The other method of closing such a transaction is for the American importer to go to an American bank and there purchase a draft drawn by the bank upon an English bank in favour of the English exporter. In either case, if the transaction stood alone, money would have to cross the ocean in payment for the goods. But, as a matter of fact, American exporters are at the same time shipping goods to English importers, and are thus securing counter claims upon Englishmen. It is evident that, if the claims upon the one side are equal to the claims upon the other, no money need be sent, provided that the various claims are brought together and are cancelled. It is precisely this function that banking houses engaged in international business perform.

They buy bills from exporters and sell drafts to importers.

We have here assumed that only two countries are parties to the international exchange. When we consider the case of several nations or of all, there is no difference except greater complexity. Thus it is evident that if A in London owes a sum of money to B in New York, while C in New York owes the same amount to D in Paris, and E in Paris in turn owes the same amount to F in London, the debts of all may be settled without a single penny of money leaving any one of the countries.

The Rate of Exchange.—An English gold pound equals by weight 4.86 dollars in American money. Hence, in the above case, if bankers made no charge for their services, the rate of exchange between New York and London would, as expressed by an American, stand at £1 for 4.86 $\frac{2}{3}$ dollars, and, as expressed by an Englishman, at 49 $\frac{5}{8}$ d. for a dollar, or exchange would be *at par*. Let us see now some of the forces which determine how far above or below par the rate may go.

The Balance of Trade.—Assuming for the moment that the only transactions affecting international exchange are the exports and imports of commodities, we can see that if at any time one country—England, for example—is importing more goods from France than it is exporting, the balance of trade is for the time against that country. In such a state of things, London banks will have many demands for drafts upon Paris and few offers of bills on that city. Conversely, Paris banks will have many offers of bills on London, but few demands for drafts upon that city.

But it is the purpose of banks in both places to make drafts balance bills in order to avoid sending specie in payment. Hence the London banks will seek to discourage

the demand for drafts on Paris by charging a higher price, and will at the same time try to encourage the offer of bills by paying a higher price for them. Paris banks will in the same way lower the price offered for bills on London, and will sell more cheaply drafts drawn by them on that city. Exchange is then said to be "against" London and "in favour of" Paris. A Londoner wishing to meet a debt of 25·22½ francs in Paris will be obliged to pay for the necessary draft more than £1. He will have to pay a *premium*. A Paris debtor at the same time can extinguish a debt in London by the payment of less than 25·22½ francs for each £1 of the debt.

The "Specie Point."—Neither London nor Paris bankers will charge such a rate for drafts or pay such a rate for bills as will make it profitable for individual debtors to send the specie or bullion instead of applying to the banks. But there are even narrower limits than this set to fluctuations in the rate of exchange. The bankers themselves naturally have the best facilities for making shipments of money, and, as the rate of exchange rises or falls, a point is reached at which it will be more profitable for the banks to send the metal in settlement of outstanding balances. This point is called the "specie point." If the bankers' cost of shipment, including freight, insurance, packing, loss of interest, etc., be assumed to be 10 centimes per English gold pound on average shipments, the specie points in the exchange between London and Paris exchange stand at about 25·12½ francs and 25·32½ francs. In other words, gold begins to go out from London when exchange falls below 25·12½ francs, and begins to leave Paris for London when exchange rises above 25·32½ francs.

Again, we must remind the student that for the sake of simplicity we have assumed trade to be confined to the two countries mentioned. When the case of international trade in general is taken into account, the subject becomes too complicated for brief explanation. We may simply say then that the rate of exchange between New York and London, London and Paris, Paris and Berlin, etc., is affected not

only by the volume and balance of trade between the two countries, but also by the volume and direction of trade balances in the trade of the other nations.

The Limit to Metal Exportation.—There is also another natural limit to fluctuations in the rate of exchange and to the exportation of the money metal. The general principle may be illustrated by supposing the case of two nations, neither of which possesses mines. Let us assume again that their transactions are limited to the mutual purchase and sale of goods. What happens when the balance of trade goes for a time against one country or the other? The rate of exchange having reached and passed the specie point, gold shipments begin from country A, the country of large imports, to country B, the country of large exports. Other industrial conditions remaining the same, A, having less money than before, will become a country of lower general prices; while in B, with its increased stock of metal, prices will rise. What results? A at once becomes a stronger seller and a weaker buyer; while B, conversely, becomes a stronger buyer and a weaker seller. But increased importations from A into B and decreased exportations from B to A will readjust the trade relations, restoring their old position, metal shipments will cease, and the rate of exchange will again approach parity.

The actual conditions are infinitely more complex. Trade is not confined to two nations; international balances depend on other things as well as the transfers of goods; the currency of different nations is not in all cases of equal stability or honesty; and many nations themselves produce and therefore naturally export gold. Yet it remains true that through the operation of such causes as we have just described the various debts of one nation to the world and the debts of the world to it do in the long run tend to balance; and the money metals are distributed among the different nations according to their monetary needs.

International Values.—The values at which goods exchange in international trade depend upon the same fundamental principles as those explained in the earlier

chapter on value, but these values are influenced especially by the fact that labour and capital do not usually flow so freely from one country to another as they move between different parts of the same country.

Let us suppose that in one of two countries just beginning to trade with one another it is found that the greatest satisfaction of wants results when raw cotton and manufactured silk are produced by an expenditure of labour indicated respectively by 15 pence a pound and 50 pence a yard, but that in the second country it is just worth while to produce the same commodities at 10 pence a pound and 75 pence a yard respectively. Assuming these to be the only two commodities to be exchanged, and ignoring the cost of transportation, we may suppose matters to proceed as follows: Silk will be sent from the first country to the second in exchange for cotton. The price of the silk will be somewhere between 50 and 75 pence; that of the cotton between 10 and 15 pence. The precise value in each case will be such that in the long run the values of the cotton and silk exchanged will be equal. Suppose it were not so; imagine that £200,000 worth of silk were exported from the first country and only £100,000 worth of cotton were imported. At first the balance might be paid in gold, but the drain of gold from the second country would so lower prices as to discourage the further importation into it of silk, and the influx of gold into the first country would by contrast so raise prices as to encourage an increased importation of the cotton. This would continue until an equilibrium was established.

Even if one country had greater natural advantages for the production of all commodities, trade, we may assume, would still take place between the nations, since the first country could satisfy its wants most economically by confining its efforts to the production of the goods in which the natural advantages it possessed gave it the greatest superiority. This truth can be seen also in the case of individuals. If a man's services to society as a lawyer are so valuable that he can in his working hours

earn £2 an hour, both he himself and society will suffer if he spends any of his time in executing his own typewriting, although he may be able to do the work more rapidly than a regular typewriter whom he can employ for ten shillings a day. Many an able man lessens his efficiency through failing to observe the principle here indicated.

The Advantages of International Trade.—By the old theory of a “favourable balance of trade” it was held that the advantage of international commerce lay in securing an excess of exports over imports, so that the balance might be paid in “treasure,” or in money. This idea is similar to another old opinion that trade between two individuals could benefit one party only at the cost of injury to the other. Now it is generally allowed that countries cannot sell unless they buy goods in exchange, or, at any rate, there must be in the long run an equivalence of exports with imports, although the two terms may include money to a small extent, and securities and services in a larger measure, as well as goods commonly understood. Moreover, a continuing excess of exports may defeat itself by raising prices in the exporting country. The real advantage in international trade is that (1) *it enables every country to enjoy goods which it does not itself produce ; and (2) it enables each country to secure a maximum of satisfaction by devoting its resources and its energies to the forms of production in which it enjoys the greatest relative advantages.*

II. RESTRICTIONS ON INTERNATIONAL TRADE

Objects of the Restriction.—Nations, however, have always laid restrictions upon international commerce, and an examination of their history discloses at least

four motives for this action. (1) In the first place, we may note that ancient nations, the Greeks, the Hebrews, and others, actually *dreaded contact with foreigners*, and attempted by prevention of international trade to reduce such contact to a minimum. (2) A second very common cause of restriction has been the desire to *make international trade a source of revenue*. Sometimes a tax has been laid both upon exports and upon imports. England to-day taxes imports alone, and she taxes these with a view to securing the greatest possible revenue. (3) In the third place, tariffs have at times been set up with the purpose of ensuring *a supply of the precious metals*, through a so-called "favourable balance of trade." No enlightened nation now deliberately pursues this course, although "war chests" are not unknown. (4) Finally, many nations to-day regulate international commerce with the object of *weakening foreign competition*, in order that home producers may be encouraged and supported. Restriction for this purpose usually takes the form of laying duties upon imported commodities of a kind that can be produced in the home country. Such taxes are called protective. Collectively they form what is called a protective tariff. Home producers are said to be thus "protected" against foreign competitors. Of course in some cases it is possible that more than one or even all of the objects of restriction that have been mentioned may be sought by the country which thus regulates its commerce with other nations.

Protection.—The general subject of protection is so vast that a complete discussion would fill volumes. We must be content here to study briefly the chief

points at issue between the advocates and the opponents of the system, and to give attention to certain general considerations of importance.

Arguments of Protectionists.—Protectionists argue that the system which they favour *promotes nationalism*, or a strong sense of national unity. Domestic trade, they say, should be encouraged because it draws together the citizens of a country, while international trade is cosmopolitan and tends to the separation of citizens from one another. It is argued that nationality and a strong national feeling depend upon a sense of national strength and independence, which can exist only when the nation has industrial interests widely diversified, and therefore protective duties should be levied to encourage such a *diversification of industry*. In a new country there exist many great natural advantages of which the inhabitants cannot, it is held, avail themselves, unless they are protected, temporarily at least, from the competition of foreign producers who have the benefit of long experience. The (1) *diversified-industry* argument and the (2) *protection-to-infant-industries* argument—upon which protectionists most strongly insist—are thus seen to be supplementary. They urge that older nations, by reason of their acquired skill and capital, can destroy in their infancy new pursuits which a younger rival is seeking to establish. (3) The contention may be expressed more comprehensively, and it may be argued that a temporary weakness, even in established industries among old nations, may expose them to a foreign competition injurious to the permanent welfare of the country, if they are not protected against the *dumping* on their markets of cheapened goods from abroad.

Closely connected with these arguments is another based upon (4) *military grounds*. Industrial self-sufficiency is a great aid to a nation in times of war, because such a condition lessens the distress due to naval or military disaster. Hence, it is claimed that nations at peace should prepare for war by protecting, nursing, and fostering the widest possible range of domestic industries. (5) The *home market* is also claimed to be *superior* because it is more secure—less liable to the shock of war or international complications. It has even been maintained by one advocate (6) that no nation can be permanently prosperous unless the elements taken from the soil are returned to it in the form of manure and other fertilisers, and that this *process of repair is possible only when agricultural products are consumed at home*.

Arguments of Advocates of Free Trade.—In opposition to protection it is frequently alleged (1) that protective tariffs are a *violation of the “natural right”* of every man to buy and sell, wherever he will, untrammelled by human laws. We may dismiss this argument at once as “dogmatism in disguise.” It is question-begging; for, in the use of the word “natural,” it assumes the very thing that must be proved before the argument can have weight. All history, and the opinions of all great modern thinkers, are against such an assumption. The existence and authority of governments are, historically regarded, as natural as is the liberty of the individual.

The cogent arguments of the advocates of a *tariff for revenue alone* are those which aim at showing that, on the one hand, the protectionist policy either fails to accomplish the end sought, or is of no assistance

in achieving the desirable object which it contemplates ; and that, on the other hand, it actually works positive injury to national interests.

In the first place, (2) they claim that protection is *not necessary to the development of national feeling*, and in proof, they point to the fact that the last half-century, which has witnessed an unprecedented spread of international trade, has also seen a wonderful growth of national sentiment throughout the world.

The free-traders claim also (3) that protective tariffs are *not necessary to produce diversity of industry*. It may be admitted that a purely agricultural nation is not likely to progress very rapidly ; but it is not easy to understand how a country, for example, like the United States, so vast, of so varied a climate, of such boundless natural resources, could be anything but a country of diversified industry, if industry itself were left unhampered by restriction and regulation.

The General Influence of Protective Tariffs.—The free-traders insist that (4) *when a new industry is started in any country as a result of a protective tariff, it is started by withdrawing or withholding the necessary capital and labour from some other industry which would naturally be more profitable, and that therefore every such new industry really means a decrease, not an increase, in the productiveness and wealth of the country as a whole*. By way of qualification, most admit that such new industries may perhaps attract to the country some foreign capital which would otherwise be invested somewhere else, and that, if such “ infant industries ” rapidly reach a condition of self-supporting independence, the nation may be repaid for the expense incurred in *hastening* their establishment.

But they emphatically protest against the application of the name of "infant industries" to businesses that have received tariff protection for a long stretch of years. Indeed, (5) the fact that "infant industries" have thus prolonged the period of their "infancy," and, in some cases, have still clamoured for protection even when they are or should be self-supporting, furnishes one of the strongest arguments against a policy of protection. If they do not become self-supporting, they continue to keep prices up beyond a reasonable point; if, when they are able to withstand competition, they still receive protection, they may by combining maintain a higher price than open competition would establish. It is beyond question that protection can favour monopoly by excluding international competition. It has usually been claimed by protectionists that the competition of home producers alone would suffice to keep prices down. But combination may take the place of competition; and home producers compete at low prices in foreign markets, while they charge their countrymen such higher prices as protection allows them to exact. In fact, this circumstance has been put forward by the critics of the tactics known as "dumping" to which we referred before.

The general argument of the free-traders, then, is that with nations as with individuals *each party to trade will regularly secure the greatest advantage if the trade is left unrestricted*. Protection, they urge, is *injurious because it diverts industry from channels which are by nature more productive to others which are by nature less productive*. This argument, it should be noted, raises in another form the perplexing problem,

what is "natural" and what is "artificial," to which we alluded when we began to enumerate the reasons advanced for free trade.

General Considerations.—Certain broad considerations, however, may finally be suggested. In the first place, the importance of the whole question has been exaggerated. England has prospered with free trade, the United States and Germany have prospered under protection. How far England's prosperity has been due to free trade, or to other causes, how far the prosperity of the United States and Germany has been accomplished in spite or in consequence of protection, we cannot tell. The tariff system is one of real, but not of exclusive, importance. Moreover, the domestic trade of the United States, to say nothing of that of England, is vastly greater and more necessary than her foreign trade; and it has been urged with force in consequence that by far the greater part of American trade is thus conducted under conditions of free trade. Similarly, it has been argued that England has not had a system of free trade, but one of free imports alone, as foreign countries impose tariffs on the entry of her goods.

In the second place, statistics regarding national prosperity, as they are usually presented, throw little light upon the question. The tariff policy of modern countries has probably been a minor factor in their industrial life. Inventions and discoveries, the spread of general and technical education, the ambition of all classes of the people, the growth of intelligence, have been among the chief forces that have made such astounding additions to the wealth of the world during the past century.

In the third place, a tariff system must often be viewed as a historical growth that has taken root. It influences directly or indirectly industrial life, and it cannot therefore be suddenly eradicated or transformed with impunity.

SUMMARY

1. International trade, in its elements a trade among individuals for money, is in effect trade among nations of goods for goods, using the term goods in a comprehensive sense.
2. The balance of trade is the chief element in determining the rate of exchange.
3. International values are influenced by the fact that labour and capital do not flow from country to country so readily as they move from district to district of the same country.
4. General prices and the money supply are regulated by trade conditions.
5. Regulation of international commerce has been common among civilised nations.
6. Protection is defended as promoting nationalism, the diversification of industry and industrial independence, saving costs of transportation, and keeping up the soil.
7. It is attacked as being unnecessary to the development of industry, and as being opposed to "natural rights." It is further claimed that it regularly diverts labour and capital from employment that would be more productive by nature to industries in which the employment of labour and capital is naturally less productive.
8. Protection may foster and protect monopolies.

QUESTIONS

1. What are the advantages of international trade ?
2. How is the rate of exchange determined ? What is the "specie point" ?

3. What relation has international trade to the distribution of money among nations ? To general prices in different countries ?
4. What is protection ? Discuss the arguments offered in its support. In opposition.

LITERATURE

G. J. Goschen's *Foreign Exchanges*.

C. F. Bastable's *The Commerce of Nations* and *The Theory of International Trade*.

F. List's *National System of Political Economy*. (Translated.)

N.B.—Many if not most standard economic treatises on Economics arrive at a conclusion generally opposed to protectionism ; but in England, on account of the efforts to draw parts of the Empire more closely together by common interests, there has recently been a reaction against free trade which has strongly influenced some English economists.

W. J. Ashley's *The Tariff Problem* and A. C. Pigou's *The Riddle of the Tariff* are representative of the two sides.

PART IV.—DISTRIBUTION

CHAPTER I

INTRODUCTORY

The Meaning of the Word "Distribution."—Having studied under the head of consumption the human wants that lead to economic activity, and the satisfactions that result from consumption ; having studied in the second place the production of goods and services for the satisfaction of human wants ; and having in the third place studied the subject of transfers of goods and services, and especially of their exchange among producers or between producers and consumers, we now come to a study of the distribution of the income of society, especially among the factors or agents that have united in its production. Under the heading of Distribution we might, and to some slight extent we shall, consider the division of the social income among individuals ; but this part of the entire subject of distribution is so vast and so complex that we cannot in such a book attempt a complete treatment.

There is one sense in which the word "distribution" is *not* used by us. We shall not use the word in the

sense of moving goods from the place where they are produced to the place where they are consumed. When we speak of railways or retail stores as "distributive agencies," we are using the word in a sense wholly different from that of the technical term which describes one of the four main divisions of economic analysis.

Before proceeding to study the determination of the great shares of the annual product of industry, it will be well to pause for a moment and consider certain general ideas that underlie all the special topics which are to follow.

Social Wealth and Social Income.—*All the economic goods that society has for use at any time constitute the social wealth. The satisfactions that flow from the social wealth and services during any period of time constitute the social income for that period.* Social wealth is, therefore, a *fund or reservoir* from which issues one of the great *streams* of social income, the other proceeding from services. The body of social wealth in any two nations may be of the same volume, while the stream of social satisfactions may be of very different volume in the two cases ; for the size of the social income depends not only upon the size of the social wealth, but also upon the completeness with which that social wealth is utilised and upon the services rendered. Well-being, moreover, is increased by the satisfactions flowing from the use of free goods, and it is not dependent merely upon income.

Private Income.—The social income is of course shared among the members of society. *That part of the social income which the individual enjoys is his real private income. The money which an individual*

receives during any period of time constitutes his money or nominal income. It is important to keep in mind this distinction, for equality of money incomes may coexist with great inequality of real incomes, and *vice versa*. Thus it is a commonplace to-day that city labourers receive regularly higher money wages than the same classes of labourers in the country. But the differences in cost of living would go far towards producing an equality in the real incomes of the two classes. Again, a house occupied by its owner yields a real income to him, though it does not enter at all into his money income.

Private Property.—Private incomes depend upon the institution of private property. Every change in the laws of property is bound to alter to some extent the production and exchange of goods, and hence the social income, but to a still greater extent and more immediately every such change reacts upon the distribution of the social income among those who share it. The importance of the laws of property is therefore evident. These laws have sometimes been so fixed and unchanging that they have wrought injustice to great classes of people ; *e.g.* the laws making human beings private property.

Primary and Secondary Processes of Distribution.—Under modern industrial conditions there are two regular modes in which individuals secure their share of the social income. In the first place, (1) there is a class of men who receive their incomes *directly from the use or sale of the product* which they make or the making of which they direct. Thus the independent farmer secures his income from the produce of his farm, either by consuming it directly or by exchanging all or part of it for money or other commodities. So, too, the professional man regularly

receives his income directly from the sale of his services. The same is true of the independent entrepreneur. His net income is that part of the goods produced which remains after he has paid the necessary expenses of the business. *This process of distribution, by which the incomes are derived directly from the use or sale of the goods or services, may be called primary distribution ; the resulting incomes are called primary incomes.*

But the greater number of those who receive regular incomes in advanced industrial nations secure them in a different way. Hired labourers, capitalists who lend their capital to others, and landlords who rent their farms—all these classes do not get their incomes directly from the consumption or sale of the product of industry, but (2) *through contractual relations with receivers of primary incomes.* This process may be called *secondary distribution*, and the resulting incomes are *secondary incomes*.

A Third Process of Distribution.—Analysis of distribution might be carried still further and show the presence of a third, or (3) *tertiary*, form of distribution and incomes. Minors constitute about one-half of the total population of every country, and their parents are legally responsible for their maintenance. They, and the large classes of delinquent and defective persons in the community, receive their incomes, not through the use or sale of goods or services produced by themselves, nor through contractual relations with the receivers of primary incomes, but from those who do receive primary or secondary incomes. If it were not for this distribution,—often voluntary, as it rests on love and benevolence,—the competitive system, which in the main dominates our industrial life, would be unendurable.

The Shares and Share Receivers.—As we have said, the distribution on which attention will be centred in the following pages is the distribution of the product of industry among the great factors that have united to create it. The factors considered in the study

of production were land, labour, and capital; and in that order we shall consider the distribution of the product. The shares of these three agents or factors are known as *rent*, *wages*, and *interest*. But the entrepreneur—he who secures and directs the organisation of the factors—is also an important receiver of a share in modern industry, and hence we shall study the principles governing his share, called *profits*. Some writers, in view of the great part played in all production by the State, treat separately the share received by the State. All that for our purposes need be said regarding the State's share in the product will be separately presented in the final chapters of the book, under the heading of Public Finance.

Relation of Individuals to the Four Shares.—And now a word should be uttered on the relation which this distribution of the four large shares bears to distribution among individuals. Individuals regularly receive their incomes by virtue of their proprietary relation to one or more of the factors or agents of production. Thus, when we are discussing the share of the annual produce that falls to land, we are at the same time explaining the principles which determine the size of the rent income of the landlord. Similarly, an inquiry into the shares received by capital, labour, and entrepreneurship, or business-direction, brings us more or less closely to the question of the income of the individual capitalist, labourer, or entrepreneur. But it is the share of the factor or agent as a factor or agent that we shall study primarily, noting only incidentally the results of the distribution on the income of individuals. The importance of the dis-

tion is plain when we reflect that a justification of the share of industry that goes to land or capital is not a justification of the landlord's or the capitalist's income, unless the possession of the land or capital is also justified.

SUMMARY

1. Distribution is that part of Economics which deals with the division of the social income among individuals and classes, and among the different factors or agents of production.
2. Our modern system of distribution depends directly upon our institution of private property. It is therefore through change in private property especially that improvement of distribution is, in part, likely to be secured.
3. Primary incomes are obtained directly from the product ; secondary incomes are the result of contractual relations with those who control the product ; tertiary incomes are incomes derived from receivers of primary and secondary incomes.
4. Private income is the individual's share of the social income. Real income consists of commodities and services which the individual commands for consumption. Money income is the money received by an individual during any period of time.

QUESTIONS

1. What is distribution ? What problems does it seek to solve ?
2. What is the relation of private property to distribution ? How is this illustrated in the case of land ? In the case of capital ?
3. If a physician's practice is worth £1000 a year, what is his money income ? Mention some of the things that probably make up his real income.

4. What other persons are likely to enjoy a part of this income? What sort of an income is that which falls to his children? Is the physician's income primary or secondary? Mention different classes of incomes with which you are familiar, and show whether they are primary, secondary, or tertiary.
5. What is the primary process of distribution? The secondary? The tertiary? Mention examples of the last. What is private income? How does it differ from social income?

CHAPTER II

RENT

As in the study of the factors or agents of production we first discussed land, so in our study of the distribution of the social income among the factors or agents that contribute to its production, we may logically begin with the treatment of the return to the first factor.

Meaning of the Term.—As used by economists, the word “rent” means that which is paid for the use of land or other natural agents. The popular meaning of the word “rent” is less exact. In everyday life we hear people use the term to describe what is paid for the use of a house or other building. But such so-called rent contains two elements, one of which is not economic rent at all. The amount paid for the use of a house includes the amount paid for the use of the land upon which the house stands, and that is economic rent; but it also includes payment for the investment of capital in the form of a building, and this latter return is not rent, but interest. The reason for the popular confusion lies in the fact that both are usually paid to the same person. In some cities, however, separate ownership of ground and building is not uncommon. One man may own the building site and lease it for a long term of years to another man

who erects a building upon it. In such a case the building becomes the property of the landowner at the expiration of the term, unless the lease is renewed. In other cases the separation in ownership is permanent, the houseowner paying an annual sum to the landowner for the occupancy of the ground. This is the case, for example, in some northern cities of England, and in Scotland, where feus, a form of perpetual ground-rent, are a familiar institution. Let us remember, then, that in economic discussions the word "*rent*" means only that which is paid for the use of land or other natural agents. Inasmuch as land is the chief natural agent appropriated by man to his use, it is common to speak of land as if it were the only natural agent for which rent is paid. It is therefore necessary to caution the student at this point that, when the word "land" is employed in these pages, it will be possible in almost every case to substitute the more general term. In other words, the same forces which determine the rent of land determine in the main the rent of other natural agents.

1. *The Quality of the Land*.—The first thing to be noted about land is its *quality*. Differences of fertility of agricultural land are known to every observer. They depend upon what one of the early economists described as the "natural and indestructible properties of the soil." In recent years many writers have objected to this statement. It has been said in denial that soil is not "indestructible"; that it may be and that it often is exhausted; that it can be removed from the land altogether, and that on the other hand it can be created by fertilisation, etc. The disagreement which these writers express is indeed due largely to their use of the word "soil" in its narrow sense.

If by the word "soil" we distinguish only the thin top layer of the land that contains certain chemical elements necessary to plant life, then some of the objections just stated are valid. Such "soil," as distinguished from subsoil and the ground lying underneath, may indeed be carted on or off the land at pleasure and may be wasted or replenished. But, even granting this, there still remain certain qualities of the land practically or entirely indestructible which cannot be produced at will, and affect the productiveness of the land so directly that without impropriety we may speak of them as "properties of the soil." Such a property is the conformation of the land. A steep gravelly hillside is not equal in fertility to a plain, nor is the north side of a mountain as productive as the south, other conditions being similar. Again, climate, although strictly speaking not a "property of the soil," is an inseparable accompaniment of the land, and upon it to a very great degree the productiveness of the land depends. It would be better to speak of these forces governing the quality of the land as *the inseparable conditions affecting its productiveness*. Of these, extent (standing room), conformation, and climate are essentially natural and "indestructible."

As we have just seen, under the "original and indestructible qualities of the soil," or, to use the phrase suggested as a substitute, the "inseparable conditions" affecting production, we must include the general physical environment, and this means much more than many modern critics have recognised. Concrete instances will aid us to appreciate the significance of this environment. In the western part of New York State in America, for example, along the shores of Lake Erie, we find a region admirably adapted to the production of grapes for use as dessert. This is due

in part to the properties of the soil itself, but more particularly is it due to the presence of Lake Erie, which, by absorbing the heat in the springtime, delays the appearance of vegetation, and, by giving off heat in the autumn, retards the action of the frost, thus affording the grapes time for ripening. If we go to Palisade in the western part of Colorado, in the same United States, we find there a region so admirably suited for the growth of peaches that some of the land is valued at £200 per acre. This is owing, not merely to the properties of the soil, but also to the peculiar location of the region, which is of such a character that the breezes keep off the frost. Land thirty miles to the west, which is apparently similar in quality, will not produce peaches and is far less valuable. Careful consideration of actual agricultural conditions leads to the conclusion that, while man can do much to create fertility, it is a serious error to attach little significance to the inseparable conditions affecting the productivity of the soil. Parallels to the American examples quoted could be found in different districts of England specially suited for the raising of particular crops or plants, or noted for the rearing of certain breeds of sheep or cattle; and on any single farm the farmer will tell you that some land is good and that other land is bad, whatever may be done to deteriorate the one or to improve the other by niggardly or unskilful, or by generous and careful, cultivation, or by withholding or applying appropriate manures.

While it is true that the soil can be removed, and that fertility can be increased or diminished, and consequently is not indestructible in a physical sense, we may speak even of fertility as economically perpetual, just as one modern economist has called "capital value" perpetual. While the land yields an annual return, its fertility can be maintained and also increased by wise husbandry. It is only, then, by wasteful and prodigal methods of agriculture that the original gifts of nature consisting in the fertility of the soil are exhausted. Similarly, the value of the capital invested in a manufacturing plant is maintained

under wise management, although the concrete capital forms are being constantly destroyed. But, as it is easier to preserve the fertility of the soil in perpetuity and to increase it than it is to maintain and increase the value of capital, land has in this particular respect a marked superiority.

Fertility, even when artificial, becomes essentially a part of the land itself. The farmer, when he invests his capital in fertilisers, makes a contribution which becomes indistinguishable from the soil. From such a case, where capital is embodied in the land and assimilated to it, we pass by insensible gradations to fences, barns, houses, etc., which more and more retain their distinct character as capital that can be removed and can also be reproduced. Where, then, is the line between land and capital to be drawn? We might, to be sure, restrict the term "land" to land in its natural or prairie state, and apply the term "capital" to all *products*, including even the soils of old lands which have been kept productive by fertilisation. But this distinction, while it is perhaps logical, would for practical purposes be confusing. On the other hand, if we include under land all capital that has been insensibly incorporated in it, we must acknowledge that there is no hard and fast line of division between land and capital. Here again we are reminded that in Economics, as in daily life, distinctions are governed by convenience, and that they are good or bad according as they prove more or less useful.

The distinctions between land and capital are undergoing discussion and may be regarded as debatable ground. We cannot enter into the controversy in this

place or give all the reasons why it seems to us that the differences between the two are fundamental in their theoretical and practical significance.

2. *The Situation of the Land*.—The second great fact to be noted about land is its *situation*. On one side this characteristic is closely connected with the climate. Thus, the significance of situation near a large sheet of water or near a mountain range has already been illustrated. But the situation of land with regard to the consumers of its products is of even more significance. Other things being equal, land ten miles from a market is more valuable than land twenty or thirty miles away. The difference is one of communication and of transport, and therefore, of accessibility, and that depends mainly upon distance. But land may be far away, and yet easy to reach, or near, and yet difficult of access. Changes in the cost of transportation therefore affect rents profoundly. The agricultural rents of England were revolutionised during the last quarter of the nineteenth century by cheap ocean transport, which practically brought very distant lands much nearer to her shores.

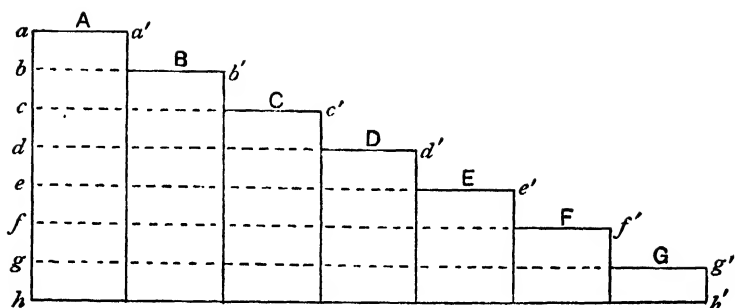
To this fact of situation we must ascribe almost wholly the enormous rents paid for city building lots, as contrasted with the lower rents of lots in suburban places or in smaller towns. Here, too, rapid and easy transport powerfully affects the rents. Good means of quick transit increase the value of suburban plots and check the rise of rents for residential sites in the centre of the cities.

And now, having noticed that all the minor economic differences in land can be resolved into differences of *quality* or of *situation*, we may proceed a step farther

and reduce these two differences, for the purpose of convenience, to one alone, viz. *desirability*. Suppose, for instance, that a man in Oxford owns two farms, one in the county of Northampton, the other in Oxfordshire itself. If the Northampton farm produced thirty bushels of wheat to the acre, and it cost the price of ten bushels per acre to carry the crop to the market in Oxford, while the Oxfordshire farm raised twenty-two bushels per acre and it costs two bushels alone per acre to take the crop from this farm to the market, the farms are equally productive as far as the farmers and the landowners are concerned. Other conditions being the same, the two pieces of land are equally desirable. In short, we may say that they are equally *good* land. Whenever we speak of good land therefore in connection with the subject of rent, we mean land which for all reasons taken together is desirable. It will be absolutely necessary to keep this point in mind in studying the following pages.

RENT OF AGRICULTURAL LAND

To-day there exist large areas of land in certain parts of the world which may be had for nothing. Of this land some is cultivated and yet pays no rent ; some is not cultivated at all. Why, then, is it that some land will bear rent under such circumstances ? Obviously, because that land is more desirable than the land which may be had for nothing. And how much rent will it bear ? It is equally obvious that, assuming the cultivators to be of equal degrees of efficiency, the rent will be measured by the difference of desirability. Let us illustrate this by a diagram.



Suppose the above to represent all land, arranged in seven groups according to desirability, each small parallelogram representing four bushels of product per acre in excess of the amount of the product necessary to pay for marketing the crop. Then the first group, deducting enough of the product to pay for transportation, will put in the market 28 bushels of wheat per acre ; the second, 24 ; the others, 20, 16, 12, 8, and 4, respectively. Now, if the people are few in number and need a small part of the land alone, they may cultivate only *A*, or the most desirable land. As long as there is enough of this land, if it is of equal desirability, there will be no rent, for no man will pay rent for what he can obtain for nothing. But the time may come, with increasing population, when more land is needed, and cultivation is driven down to *B*. Land is still free there, but all the land of group *A* has now been appropriated. If, then, any man insists upon cultivating land which belongs to an owner in group *A*, he must pay for the privilege. How much must he pay ? Evidently it is 4 bushels per acre, since in group *A* he can produce 28 bushels per acre, while in group *B* he can produce only 24. The land in *B*, which is free land, is now situated on what may be called the *extensive*

margin of cultivation ; that is, the grade of land which will just pay for cultivation and no more. The normal reward of labour in agriculture is the total return to farming on this margin, after deducting a return for the capital invested in the work. The surplus product from the superior land—in other words, the advantage which owners of land in *A* have over the tillers of the free land—is rent. And it is rent whether the owners of the land in *A* work the land themselves or lease it out to others. The money expression of the rent in this case is the market price of the 4 bushels of wheat that represent the differential advantage in production possessed by workers on the more desirable land.

If population increases still further, without any improvement in the arts of production or of consumption, the margin of cultivation will in time descend to land in group *C*, where the number of bushels produced by a given amount of labour and capital is less than that produced before. Land in *B* will now return a rent of 4 bushels per acre, while land in group *A* will yield a rent of 8 bushels per acre. If the margin of cultivation is forced down later to *E*, then rents on land in *B* will equal one-half, and on land in *A* will equal four-sevenths, of the entire product of such land.

Intensive Cultivation.—With the figure in mind, let us place ourselves again at the point where all the *A* land is taken up and the men are beginning to seek new means of production. We have assumed that they will take up new land in group *B*. This is not the only possibility, however. It is probable that land in *A* may be made to produce more than it has yielded before, if the amount of labour and capital expended

upon it is increased. In other words, it will be possible to cultivate the old land more *intensively* at a profit. Suppose that ten men formerly cultivated 100 acres of *A* land, raising 2800 bushels of wheat, and that now eleven men put their labour upon the 100 acres. It may be that the 100 acres will now produce 3060 bushels, in which case it is evident that the labour of the eleventh man has made a difference of 260 bushels. The 2800 bushels raised by the ten men meant 280 bushels of crop per man. In accordance with the *law of diminishing returns*, the eleventh man does not increase the output proportionately, but he is still producing two bushels more than he would if he were to work on the *B* land, where by our assumption ten men could produce only 2400 bushels on each 100 acres. The owner will give such a labourer only what he could get elsewhere, on the *B* land, which would be 240. The difference between the 240 bushels and the 260 bushels, the owner of the superior land takes for himself. Encouraged by this, the owner thinks of hiring a twelfth man, but concludes that he would thus secure a crop of only 3280 bushels. Hence the twelfth man would increase the output by only 220 bushels, while he would have to be paid 240 bushels, the amount that he could earn by working free land in group *B*. All new labourers, therefore, in excess of one for every ten of the earlier labourers, would find it more profitable to put their labour upon the free land. Hence, as the demand for agricultural produce increases relatively to the supply, new labour and capital are expended upon land already under cultivation as well as upon land not used before. The rent of such land is increased by the surplus yielded by every

addition of labour and capital. In other words, there is a change in both the *intensive* and *extensive* margins of cultivation. With every increase in the price of produce, and with every fall in the extensive margin of cultivation, more labour may be employed profitably on land already cultivated. Thus the landowner, who in the case last supposed could not afford to employ a twelfth labourer, may be able to employ thirteen or even more when the extensive margin of cultivation has fallen to group *C* or *D*.

From the foregoing illustration it is clear that the theory of rent is based upon that law of diminishing returns, which has already been explained in a previous chapter. It is evident that, *barring improvements in the arts of production or consumption*, each addition to the number of mouths which must be filled, at least beyond a limited number, makes the task of drawing sustenance from the earth more difficult. But we know that improvements have hitherto kept pace with increasing population, or have outstripped its growth, to use the more correct description.

RENT OF URBAN LAND

The fact that situation is the factor of special importance in determining the desirability of urban land leads to certain results of a peculiar nature that call for separate discussion. We may consider first of all land used for residential purposes. Cities have quarters which natural beauty, healthiness, convenience, and in an especial measure fashion have rendered particularly desirable. In proportion to demand the supply is sharply limited, and this circumstance causes a keen competition.

The height to which this competition will carry rents will depend upon the number possessing large amounts of wealth, and upon their readiness to spend their money on what they regard as desirable sites for homes, and fashion has perhaps in towns more influence on such intensity of desire than any other force. Similar considerations will affect the height to which the rent of business sites will rise. The higher the average of well-being and the more willing people are to spend their money, the greater will be such rents. Fashion enters here, too, particularly in the retail trade. If people spend money readily, they will pay appreciably more for an article in a convenient locality than for the same commodity in a situation slightly less convenient. This will often enable those whose business is in desirable locations to secure higher prices with a larger quantity of sales, or to increase still further the number of sales by keeping to the price asked by competitors situated less desirably. *Intensity of traffic* is an important consideration in determining the rent, and consequently the value, of retail business property. We must also take into account the quality of the people who are responsible for this traffic, the rent depending both on numbers and on quality. In some cases a high degree of intensity may counterbalance a lack of fashion, or even more than counterbalance it, and retail business property in a neighbourhood which is not fashionable may, in consequence of the intensity of traffic, have a higher rent than similar property in a fashionable locality where the traffic is comparatively small. The influence of fashion, however, can be seen in a very marked manner in a town like London, where large numbers of rich people would on no account make

purchases in an "unfashionable" street. The result is a large surplus gain secured by business sites favourably located. Competition transfers to the landowners that surplus due to situation. This explains a fact which has puzzled many observers, namely, the high rents in American as contrasted with European cities. American cities are spacious, but other considerations besides space govern rents.

Reflection will show that where the two elements of a high degree of scarcity and desirability enter into the location of land on the seacoast or in inland health or pleasure resorts, similar causes will produce large rents. On the other hand, it is commonly a matter of little or no concern where the potatoes and beef we eat are produced, and the result is that agricultural rents are governed less noticeably by situation, the means and cost of transport being the chief consideration in this matter.

The Relation of Rent to Value of Product.—It is often said that rent has no influence on the value of the product, and that rent differs herein from wages and interest, which are said to "determine" price. This view at first sight seems to be paradoxical, as the tenant must pay rent to the landowner as well as interest to the capitalist and wages to his labourers. The paradox is explained by saying that prices are fixed by the expenses of production on the poorest land, where wages and interest are paid, but no rent is possible. Hence the rent that is paid for the better land is the result, and not a cause, of the price fixed in this way.

This doctrine is true in the main, but it has its limitations. To the extent that land is "indestructible" and does not need any treatment to maintain its services to production, it is correct to say that rent does not enter into price. On the other hand, to the extent that labour

and capital require a remuneration to keep them from perishing, wages and interest do clearly enter into price. But so far as regards the payments necessary to keep up the fertility of the land, and so far as regards the surplus above maintenance which labour and capital receive, the statement is not true. Moreover, the rent which could be obtained for land used for one purpose (e.g. the growth of wheat) is an element in determining the employment of land for another purpose (e.g. pasture), and therefore helps to fix the margin of cultivation for the second use and to settle the necessary price of the produce sold.

The Relation of Rent to the Value of Land.—The value of land, however, is determined by its rent. *The value of the product determines rent, and rent in turn determines the value of the natural agent.* If any piece of land is so much more desirable than the poorest piece which is in cultivation that it will return a rent of £1 per acre, and, if at the same time and place capital regularly commands 5 per cent. interest, then the owners of the land and others will regard each acre of this land as equal in value to an amount of capital that returns £1 per year, or £20. Hence we may say that *the value of land is its rent capitalised at the current rate of interest.*

Definitions of Rent.—We are now prepared to define rent more exactly and completely than was possible before, and to see that different definitions which may be given describe it in reality from different points of view. Thus the definition “rent is that which is paid for the use of land or other natural agents,” conveys no idea of the power by which it is secured nor of the way in which its amount is determined. Hence, we may add the following definition: *Rent is the amount produced by land or other natural agents in excess of a normal return to the labour and capital devoted to the cultivation.*

In this definition, however, there is no direct indication of those differences of desirability from which rent arises. We may, therefore, give as our final definition, the following : *Rent is a differential return received by the owners of superior natural agents, the amount being determined by the extent to which the given natural agent or the given use of the agent surpasses in productiveness the poorest natural agent of the same sort or the least profitable use of such a natural agent that society requires to satisfy its need for the product.* In all this we have assumed that cultivators possess and display equal efficiency. Differences of product due, not to differences in the natural agent, but to differences in the ability of those who use the natural agent, do not require explanation at this point.

SUMMARY

1. Rent is the return paid for the use of a natural agent, and is equal to that part of the product of the natural agent which is in excess of the product of the poorest agent of the same sort that is cultivated.
2. So long as land exists in excess of all demand, rent is determined by the excess of product over that of the poorest free land.
3. When all land is taken up, and all is cultivated that will repay cost, rent is determined by the excess of product over the necessities of labourers,—as determined by the law of wages,—and the necessary reward to the capital invested in cultivation.
4. Increased demand for the products of the soil regularly results in the cultivation of more land (extensive cultivation) and in the application of more labour and capital to that already in cultivation (intensive cultivation).
5. In a given stage of the arts of production a point is reached in the application of economic energy to any natural agent, beyond which the return to further applications

of energy is proportionately less. (The Law of Diminishing Returns.)

6. Special importance attaches to situation in the determination of urban rents.
7. The value of any natural agent is determined by its rent capitalised at the current rate of interest on free capital.

QUESTIONS

1. On what is rent based ? Why would rent disappear if land were unlimited in amount and all were of equal quality ?
2. Discuss the differences in desirability of land.
3. How is the amount of rent determined when free land exists ?
4. What is the extensive margin of cultivation ? The intensive ? What is intensive cultivation ? What considerations determine how far intensive cultivation may profitably be carried ? State the law of diminishing returns. Show how it applies to land used for manufacturing. For commercial buildings. For city residences.
5. What effect does a lowering of the margin of cultivation have upon rent ? Why ?
6. What is the effect of improvements in the arts of production ? Of consumption ? Of transportation ? What are the forces in society that tend to raise agricultural rents ? Urban rents ?
7. Why does not rent determine price ?
8. How is the value of any natural agent measured ?

LITERATURE

- A. Marshall's *Principles of Economics*.
T. N. Carver's *The Distribution of Wealth*.
H. George's *Progress and Poverty*.
J. A. Hobson's *The Industrial System*.
F. A. Walker's *Land and its Rent*.

CHAPTER III

WAGES AND THE LABOUR PROBLEM

I. HOW WAGES ARE DETERMINED

WE have pointed out that of the factors or agents of production, land and labour are primary and original. Having discussed rent, or the portion of the product allotted, or falling, to the owners of land, we may next properly consider wages, the share assigned to or received by labour. First of all, it should be noted that in the study of wages there are really two distinct problems to be investigated. What share of the total product of industry falls to labour? This is the problem of *general wages*. But having answered the question, we shall still have to ask ourselves why some classes of labourers have greater earnings than others; why glass-blowing, for instance, is rewarded by a higher rate of wages than is the digging of ditches, and so on? This second problem is called the problem of *relative wages*. We shall discuss the two problems separately as we have stated them.

1. *General Wages*.—It follows from our discussion of the determination of value that, if wage-earners were in excess of all demand for their labour, such labour would possess no value; wages would be *nil*. On the other

hand, if labourers were few and in great demand, only the more intense desires for labour could be satisfied, and wages, or the value of labour, would be very high. It is evident, then, that wages, the value of labour, depend primarily upon two circumstances : the number of wage-earners and the demand for their labour. In other words, wages depend upon the relation between the supply of labour and the demand for it. But this statement is too general to be of great use. We must therefore consider further the forces that determine the supply and the demand.

The Number of Wage-earners.—We have already discussed the tendency of the human race to multiply. Beyond all doubt the wish for marriage and for a family is one of the strongest and most universal of human desires. But over against this wish stand many others—desires for food, clothing, and a multitude of things which are of course arranged and satisfied in the order of their economic importance. No man intentionally satisfies weaker at the expense of stronger wants. In the whole list of desires, that for marriage must take its place according to its importance. The rank of this desire varies with individuals and with classes. Some regard education, books, art, or even a substantial balance at the bank as more important than marriage in their scale of wants. *The amount of necessities, comforts, and luxuries which any person or class is accustomed to enjoy and to insist upon possessing or commanding, is the “standard of life,” or the “standard of comfort,” of that person or that class.* This standard of life, though incapable of precise definition, is a very real and powerful force in the determination of wages. Whenever wages tend to fall below the point at which

the workman can maintain his standard of life for a family, many workmen will do without the family, and will attempt to maintain the standard for themselves alone. This force operates upon both men and women to prevent or to postpone their marriage, and to diminish the number of children born. *The higher is the standard of life, the greater is the persistence shown in maintaining it.* Those whose standard is very low are often heedless or hopeless when it is threatened ; while those who have attained a high standard display marked caution in delaying marriage until their income will justify such a course. It is plain, then, that the standard of life constantly limits the number of wage-earners, and hence tends to maintain or even to increase the value of labour.

The Economy of High Wages.—In what has just been said we have simply noted the influence of the standard of life upon the number of labourers in the labour market. But the result is equally striking when we proceed to consider the influence of the standard upon the efficiency of labour. Even from the standpoint of employers as a class the policy of depressing the labourer's standard of life stands condemned. Labour, to attain its highest efficiency, must have character and intelligence as well as mere animal strength. More and more, business men are coming to learn the "economy of high wages," and to recognise that "cheap labour is dear labour." Especially is this maxim true at the present time when industry is becoming more and more divided into the two classes of machine-industry and hand-industry. English labour is in many industries the cheapest labour in Europe because it is the best paid. The higher wages

of the English navy, Thomas Brassey, the railway contractor, found, were less costly in the end than the lower wages of those of other countries. High wages render possible a high standard of life. The high standard of life makes the labour intelligent, hopeful, and full of character, as well as physically more efficient. And the increased efficiency in its turn makes the higher wages possible. Thus by action and reaction the standard of life is both a cause and a result of the wages paid.

The Demand for Labour.—In our previous remarks we have considered especially some of the forces that operate to control the *supply* of labour in the labour market. In other words, we have been considering the problem of wages chiefly from the standpoint of the supply of labour. It remains to see how far we can explain wages from the standpoint of demand. Manifestly, under our present industrial system, capital will not be saved, nor will businesses be conducted, unless those who save the capital, and those who conduct the business, receive a reward for their contribution to production. If the labourers in seeking higher wages enforce demands which would rob the capitalist of the interest that is his due, or the entrepreneur of the profits that secure his services, then in a short time the capital will cease to be saved and the unprofitable business will be discontinued. It is evident, therefore, that the demand for labour has an upper limit in the value to society of the product of the labour. By unjust laws, or by inequitable conditions, the employers may be able to secure labour for less than the labourer contributes to the value of the product, but it is not easily conceivable that under present conditions of

industry the labour can for long get more than it actually produces.

Summary of Theory of General Wages.—Summing up what has been explained at length, we may now say that *wages depend upon the relation between the supply of labour and the demand for it. The supply of labour, and hence the lower limit of wages, is fixed with some sharpness by the standard of life of the labourers. But as this force operates but slowly, it may in extreme cases happen that the only lower limit to wages is the amount which will enable the labourers to live.* In earlier days some economists seemed to think that wages would rest normally and in the long run at this point of bare subsistence, and the law of wages which they formulated was therefore called, from its rigidity and its harshness, the “iron law of wages.” *On the side of demand, we can only say that there is an upper limit, fixed by the value of the labourer’s contribution to the product, beyond which wages cannot normally go, as the demand for labour cannot secure a higher price than the price of what that labour produces. Consequently the demand for labour may result in giving to the labourer in wages the whole of the product of industry after deducting rent and such minimum interest and profits as are fixed by laws to be explained later. Between the lower limit, set by the standard of subsistence or by the standard of life, and the upper limit, set by the value of the labourer’s contribution to the product, wages will fluctuate according to the relative bargaining strength of the two parties to the wage contract.*

2. Relative Wages.—Passing now to the problem of relative wages, to the question why some classes of work are paid for at a higher rate than others, it is

evident first of all that the pay of labourers in any class of employment depends upon the relation between the demand for such labourers and the supply of such labour, and upon the relative bargaining strength of those belonging to each group. Thus far the considerations discussed already bear upon relative as upon general wages. But in the treatment of the former certain special considerations should be borne in mind. Differences in relative wages are settled in the great majority of cases by past conditions. To understand them we must go back to a man's father or his grandfather. Occupations where remuneration is high are usually so difficult to enter that few are able to surmount the obstacles. Thus peculiar and rare qualities may be required, or an expensive training, which few parents are at once able and willing to provide.

While the various sorts of labour are almost infinite in number, they are nevertheless susceptible of fairly distinct classification. These classes have commonly been called "non-competing groups." Perhaps the best classification of these is that made by Professor Giddings. It is : *automatic manual, responsible manual, automatic mental, responsible mental*. The words should explain sufficiently the different groups represented by them. Between any two groups very little competition is possible at any given time. What competition there is, is a matter of years, resulting, as it must, from the action of parents in preparing their children for entering one or other of the groups.

The Influence of School.—A good system of national education continually increases the amount of freedom in the choice of callings. Education imparts greater

knowledge regarding the advantages and requirements of different occupations, and at the same time it puts its possessor in a position where he can more readily realise the one and meet the other. It therefore tends to lessen the competition for the lowest grades of employment, and thus raises the wages in that region; while it tends to lower the wages in the higher grades by rendering the competition for such employment more intense.

Adam Smith enumerated the following five causes of differences of wages in different employments : first, their *agreeableness* or *disagreeableness* ; second, the *ease* or *difficulty of learning them* ; third, the *regularity of employment* ; fourth, the *need of trustworthiness* in the workman ; fifth, the *probability of success*. Although this summary of determining conditions assumes an unreal freedom of competition among workmen to secure the greatest net advantage from their employment, it is nevertheless suggestive and helpful in explaining actual differences in relative wages. It will therefore be a good exercise for the student to apply to existing occupations Adam Smith's statement of the causes of differences in wages.

II. LABOUR ORGANISATIONS

Wages have been shown to be dependent largely upon the relative bargaining strength of the labourers as compared with that of entrepreneurs and others who contribute to the work of production. The same truth could be proved to hold about the other conditions of employment which enter into the wage contract. Such being the case, it is natural that under our modern

wage-system labourers have sought to increase their bargaining strength by every means in their power. One of the most obvious plans is that of uniting their strength in labour organisations. By such organisation labour is enabled to substitute "collective bargaining" for the individual bargaining under which the workman is placed at a manifest and great disadvantage. *Labour organisations, then, are more or less permanent combinations of labourers formed to increase their power of determining the conditions of employment.*

Origin.—The old mediæval guilds were organisations that controlled all the factors of production. Employers and employed united in a single body to regulate production, but the control rested chiefly with the masters. Modern labour organisations, on the other hand, are the result of our capitalistic system of production, and date only from the eighteenth century. They embrace, as a rule, employees alone, and the purpose is to promote the interests of the labouring class whenever these interests clash with those of the employers. It is the sharp separation of classes characteristic of modern industry that has made labour organisation natural and necessary.

Two Forms of Organisation.—Labour organisations may be divided into two kinds, which as a matter of fact can be distinguished to-day in England. The "old" trade-unions of England were primarily unions of skilled artisans of distinct crafts. According to the old idea, each craft should be organised by itself. The "new" trade-unions by contrast are organisations of the labourers in general, skilled and unskilled. They aim at breaking down the barriers to common action found in differences of occupation.

The two forms of unionism have, however, in later times shown some tendency to drop the differences marking their respective combinations. But there is still much discussion among those interested in labour problems from outside on the vexed topic of the appropriate structure of trade-unions. The merits, too, and demerits of federation and amalgamation, and the advantages and disadvantages of organisation by craft or division of a craft, as contrasted with organisation by class or status, cutting across differences of occupation, have attracted the attention of the more enterprising and thoughtful of the officials and in the rank and file of practical trade-unionists. The "new" unionism nevertheless has become in many respects less aggressive, if in some trades and districts the sudden violence favoured by syndicalist advocates of the "general strike" and the "class war" has captured the imagination of individual leaders.

Growth of Labour Organisations.—The numerical strength of labour organisations in England has been attested by official figures. The number, of course, varies from time to time. A period of prosperity for the organisations is generally followed by one of reaction. The Labour Department of the Board of Trade in 1911 estimated the membership of British trade-unions, 1,172 in number, at 3,010,954.

Strikes.—We cannot here discuss all the policies of labour organisations or all their methods of accomplishing their objects. One of these methods, however, calls for special comment. The *strike* constitutes one of the chief weapons of labour, organised or unorganised, just as the *lockout* is one of the chief weapons in the hands of the employers. Strikes produce obvious harm,

both strife and loss, and therefore every effort should be made to avoid them, if the result desired can be secured by other means. It is only as a last resort that they can be justified, or are justified by the unions themselves. Yet the power of such action as a lever of advantage cannot be despised. Observation shows that even where strikes are apparent failures at the moment, they may yet achieve much for the employees by begetting a fear of their recurrence sufficient to produce fairer treatment even from unwilling and unjust employers.

Strikes are most likely to win success when they are declared during a period of improving business ; and hence strikes for higher wages are less often failures than those designed to prevent a reduction. Indeed, it has been claimed that employers have in cases secretly encouraged such a strike when they have desired to close their factories in a time of slack business, in order to drive a better bargain with the men when the strike has proved unsuccessful.

The Influence of the Public.—A powerful influence against violence and needless strikes is the recent undue growth in public knowledge and in public interest in matters that concern labour. Popular support of their cause is an object of frequent appeal by labour organisations. And we shall see afterwards that public opinion has been brought to bear on the pacific settlement of industrial disputes.

Incidental Benefits of Labour Organisations.—

1. *Educational Influence.*—The importance of the educational influence of labour organisations deserves notice. The debates and discussions which the unions foster tend to counteract the deadening effect of

division of labour pushed too far. Moreover, they furnish some opportunities for social culture, and in some ways develop the finer side of character.

2. *Elevation of the Standard of Life.*—It is often objected that they seek by imposing hindrances on some of their members to raise the wages of the rest. What they really try to do is to maintain “standard” rates. It is objected again that the limitation of numbers in one trade, if enforced, can only issue in overcrowding others, and that therefore, if all trades were successfully organised and pursued this policy, the results in one part of the labour field would neutralise the results elsewhere, and nothing would be gained as a whole. But such an objection overlooks the significant fact that the union may arrest the imprudence that leads to over-population, and possibly maintain a just balance between the need of society for the labour and the need of the labourer for a complete human life. And, in fact, many, if not most, trade-unions seek to be comprehensive rather than exclusive in their membership.

Defects of Labour Organisations.—Some of the defects of labour organisations have already been indicated. These and other drawbacks, some inherent in the nature of the unions and some accidental, may be briefly summarised as follows :

1. *Based on Strife.*—It may be said that labour organisations are based, originally at any rate, on strife. They try to prepare their members for industrial war ; but we must hope for peace in industrial society, and any organisation that does not look beyond strife to its cessation has a certain disadvantage.

2. *Limitation of their Benefits.*—They have often, in

their early history, tried to gain benefits by a selfish and exclusive policy towards other labourers. In some cases, they have been able to secure a monopoly. It must be admitted, on the other hand, that there is sometimes, even in these latter days, a valid excuse for a policy of restricting numbers. Unscrupulous employers have sought at times to increase unduly the labourers in a single occupation in order to maintain a reserve force of unemployed from which to draw in case of need, and have thus kept down wages.

3. *Production not directly Increased.*—Even when trade-unions do not actually attempt to limit production by restraining individual action, they usually make no great effort to increase the output or to diminish the waste of competition. This may be considered narrow and short-sighted action. What is to be desired is not merely that a greater portion of the wealth produced should fall to the wage-earners, but that the total “national dividend” to be distributed among all classes should be augmented; in other words, that *the labourer should receive an increasing share of an increasing product.*

4. *Ultra-conservatism.*—While radical in many ways, trade-unions have probably been too conservative in clinging to old methods and in opposing progressive policies that will not benefit them immediately as labour organisations.

5. *Narrow and Short-sighted Views.*—It has been one of the weaknesses of such organisations in general that they have not been interested sufficiently in public measures and reforms designed to benefit society. For example, it may be said that they have given too little attention to sanitary matters and too small

support to public health authorities in efforts to benefit the poorer classes. At times, perhaps, they have favoured measures which were bound to be ultimately injurious, simply because such measures would increase temporarily the supply of work. Opposition to labour-saving machinery and processes is of this character.

6. *Lack of Flexibility*—Labour organisations show another inherent weakness which is, however, common to all great political and social organisations. Here “red tape” is necessary. General rules must for the most part govern, and individual interests must often be sacrificed to the welfare of the whole. Anyone examining the nature of labour organisations will be able to discover many valid reasons why union men should object to working with non-union men. (a) The union entails a certain expense, and union men object to see non-union men reap the benefits secured to labour by the organisation without sharing the burden of its support. (b) A more serious argument consists of the danger that employers will gradually substitute non-union men for union men strong in their organisation, and may thus break down the union before the men can perceive the drift of their action. A plausible pretext may be found for discharging a workman, obnoxious as a labour-leader, however faithful and efficient he may be in his work.

7. *Undue Absorption in Politics*.—It has been urged that of late years trade-unionists, by turning their attention to politics, have, to some extent at least, injured rather than promoted their real interests as members of labour organisations. Their officials, becoming members of parliament, have failed to keep in close touch with the rank and file, and have had

their thoughts drawn away to other topics than those which should form their primary concern. On the other hand, it is desirable that the Legislature should contain representatives of the views of labour organisations, and some of the aims at any rate of trade-unionists may conceivably be achieved by parliamentary enactment.

III. THE RELATION OF THE LABOURER TO THE PRODUCT OF HIS LABOUR

Labour organisations strive to secure higher wages and better conditions of employment for working-men than they would otherwise obtain, and thus increase their share of the product of industry. But both by private employers and by economists other plans have been considered for securing to the labourer a more favourable relation to the outcome of his labour. Some of these schemes call accordingly for discussion at this point.

1. *Piece-work Wages*.—The system of paying labour by the unit of product—or *piece-work wages*—is a modification of the more common *time wages*, where the labourer is paid a fixed sum for each unit of time worked. The system of piece wages can only have a fair trial in industries which allow of considerable division of labour among occupations that are of a routine nature.* Thus compositors in a printing-office may be paid by the thousand type set up. Payment by piece, where possible, has certain evident advantages both for labourer and employer, and has met with very general favour or acceptance among trade-unions. But in some industries abuses of the system

have been so many and so flagrant as to arouse active opposition. It has at times been used by unscrupulous employers to break down regulations and even laws limiting the hours of work, and still more frequently to cause a reduction of wages. Thus, after the workers have attained a high rate of speed by straining every nerve and muscle to earn high wages, the price per piece is reduced in such a way that the workmen can earn by their increased exertion little, if any, more than they were earning before the piece-work system was introduced.

2. *The Sliding Scale*.—The system known as the “sliding scale,” by which wages are made to depend upon the price of the product, has been adopted frequently among iron and steel workers and coal miners. In recent years the scheme has apparently lost favour, and complaints have been made that the adjustment is too slow in its operation. But the method has the merit of considerable elasticity, and the principle has continued to be recognised even when the scales have been abandoned.

3. *Profit-sharing*.—Under a system of profit-sharing the workmen in any factory, or at least a part of them, are allowed to share in the profits of the concern. A stated wage is paid, and then, at regular intervals, a part of the profits of the business is divided among the employees. There are many differences of detail which do not concern us here. Advocates of the system urge that it (a) *promotes the economical use of materials and machinery* by the employees, (b) *generally increases their zeal and efficiency*, and hence results in (c) *a larger total product* and a (d) *larger revenue for the wage-receivers*. Its weakness is that it is not expedient to make the

workmen bear the losses as well as participate in the gains, while the system without such a provision may come to grief. Profit-sharing has often, if not generally, been extended to include *capital-sharing*; that is, part ownership of the capital by the workmen, with some participation in the management. Trade-unionists do not view the plan with favour, as it cuts athwart the collective solidarity of labour as a class opposed to capital, and binds together individual employers with their employed. It also endangers those "standard" rates of wages which trade-unionists require.

4. *Co-operation*.—If industry, as ordinarily organised in our great mercantile and manufacturing establishments, may be likened to a form of *despotism*, an establishment in which workmen participate in capital, ownership, and management, under the chief control of one who is recognised as an industrial superior, may in the same way be likened to a *constitutional monarchy*. And finally, as opposed both to industrial despotism and to industrial monarchy, we have the third form, *industrial democracy*. Industrial democracy means self-rule, self-control, self-direction, by the workmen in their efforts to gain a livelihood. This is achieved in pure co-operation. Co-operation may have either of two forms, *coercive* or *voluntary*. Coercive co-operation, which is socialism, will be discussed in a separate chapter. Here we are concerned only with the voluntary form, which is indeed that always meant when the word "co-operation" stands alone.

Under this system the workmen combine their own capital, purchase their own plant, and manage their own industrial affairs, in their own way, at their own risk, sharing profit or loss as the case may be. At least

this is the method of what economists know generally as *co-operative production*. *Distributive co-operation*, on the other hand, is a system of co-operation in wholesale or retail trading. Distribution is here used not in the sense in which it is ordinarily employed in Economics, but in the sense in which we speak of the merchant's business as distributive.

Distributive co-operation is, viewed from one standpoint, only an imperfect form of co-operation. Consumers of finished goods combine to purchase what they need, and thus they save the middlemen's profits. They form a company, subscribe for shares, employ a manager and clerks,—who often do not share in profits,—and start a business. Profits are sometimes divided only on the shares, but the approved mode is to pay a moderate interest on the capital and then divide profits among the customers. In such cases the customers share in proportion to their purchases, the division being made at stated intervals.

In England and Scotland distributive co-operation has met with very great success. Co-operative production, as defined above, has disappointed the expectations of its earlier advocates. France seems to have enjoyed luckier fortune than England in this latter sphere. In the United States some instances of success are recorded, and many more undertakings of the sort have been at least partly successful. In England and Scotland Wholesale Societies have been formed to aid distributive co-operation. They furnish at the same time a steady market for some important productive co-operative concerns which they have organised, and supply the retail stores with the goods they want. But in England the consumers get all the profits.

The Strength and Weakness of Co-operation.—Pure co-operation would seem to possess certain evident advantages : (1) It *prevents strikes* by completely identifying the interests of capital and labour. It (2) *stimulates energy* and (3) *promotes economy and thrift*, since self-interest, which usually animates the employer alone, here inspires all the co-operators. No negligence in work can be tolerated and, eye-service vanishing, (4) much labour of *supervision is saved*. Best of all, there is (5) constant *education of the co-operators* in discipline and business detail.

On the other hand, to speak of the weakness of the system, (1) *divided counsels* often render the movements of such a business both clumsy and slow. Action cannot be so quick and decisive as it is when one man acts on his own responsibility. (2) It has been hard for workmen to recognise the necessity of securing *expert talent* for the work of supervision and organisation. Failure has often been due (3) to *moral defects* on the part of the workmen. (4) Finally, where success has attended the first steps of such a movement, the very *prosperity has sometimes produced dissension and disintegration*.

Arbitration and Conciliation.—We cannot dismiss this subject of the relation of the labourer to the product of his labour without a few words regarding the part that *arbitration* and *conciliation* have played and are to-day fulfilling in the strife of interests by which the social income is distributed. Conciliation is a term applied to the *regular efforts made by representatives of employer and employed or by a third person acting as a mediator to prevent differences from arising or to heal such differences before matters reach an acute stage*. Conciliation aims at the prevention of strikes or other

labour quarrels ; arbitration seeks to adjust matters when acute trouble has arisen. It is evident that conciliation is preferable, wherever and whenever it is possible.

Both conciliation and arbitration have accomplished much for the preservation of industrial peace wherever they have been thoroughly and honestly attempted. Generally in England boards are elected by employers and employed, and in a few recent instances such boards have been appointed by the State or some other public authority. In the United States a large board with national scope has been created by a body called the National Civic Federation. In this board there are representatives of labour and capital, together with other men of national prominence.

Until recently arbitration, even when public authorities have provided boards, has been voluntary. That is, the findings of arbitration boards were legally binding upon neither employers nor employed, and therefore gained their strength from the awakening of the public interest and the enlightening of the public mind on the merits of the dispute, or from the sanction exercised by strong organisations of either party to the quarrel—the associations of the masters and the trade-unions of the men. Indeed, it came to be a settled conclusion in the minds of economists and others that compulsory arbitration could not be attempted successfully by government. But in recent years compulsory arbitration has been given prominent trial on a large scale in New Zealand, the successor of the United States as a laboratory of social experiment, and, according to the opinion of some able investigators, the plan has proved its value and its practicability. Others consider that the system has defects compared with

the "give and take" of friendly discussion round a table at Conciliation Boards, that it brings instead the legal attitude of mind searching for precedents to govern cases, and that it has succeeded only when the general conditions have favoured the working men. In 1901, however, New South Wales passed a law similar in the main to that of New Zealand, after an exhaustive parliamentary inquiry into the working of the New Zealand Act. In Canada in certain industries considered vital to the public no strike or lockout can take place before a public inquiry has been held into the merits of the quarrel. This system under the Lemieux Act represents a compromise between the Arbitration Court of Australasia and the voluntary conciliation of the United Kingdom. The whole question may be regarded as still open.

Factory Legislation and Inspection.—Factory legislation and inspection also need a few words of comment in this connection, although the subject has been more fully treated in the chapters on English Economic History. Labour laws, honestly conceived and properly enforced, have been productive of incalculable good. England is the model country in the matter. Labour legislation should be designed to keep children away from regular factory work and in the school; it should restrict the employment of women as far as possible; it should limit the hours of work for different classes of work-people, particularly for women, "young persons," and children, to the length of day prescribed by medical experience, and should secure regular and convenient hours of leisure, such as are afforded by a Saturday half-holiday; it should compel employers to fence dangerous machinery and otherwise guard against

preventable accident ; and by *employers' liability* Acts it should render employers pecuniarily responsible for accidents to employees. No country has really suffered in international competition by approximation to the goal here described.

SUMMARY

1. General wages are determined by bargaining, between limits fixed on the one side by the product of the labour, and on the other by the cost of subsistence, as modified by the standard of living. The precise wage is determined by the relative strength of the two sides to the bargain.
2. Differences in relative wages are due to special conditions affecting different employments.
3. Labour organisations, a natural development of modern industry, have improved the status of labour.
4. Against trade-unions it may be charged that they are based on strife, that they are often short-sighted and ultra-conservative, and are forgetful of broad social interests.
5. Piece-work wages, the sliding scale, profit-sharing, and co-operation are plans that have been tried for securing to the labourer a more favourable relation to the product of his labour.
6. Arbitration and conciliation are playing an increasing part in the settlement of labour disputes.

QUESTIONS

1. How does the standard of living affect general wages ? Relative wages ?
2. Name the circumstances producing differences in relative wages. What is the "Iron Law of Wages" ?
3. Name the different groups of labourers. Classify different occupations according to this grouping.

4. What types of labour organisation are there ? Discuss the change in the public attitude toward unions.
5. What are strikes ? What are their chances of success ?
6. Discuss the different systems of wage payment ; their advantages and disadvantages, and their success.
7. Distinguish between arbitration and conciliation. What is the present status of the question of compulsory arbitration ?
8. What are some of the objects that can be obtained through labour legislation ?

LITERATURE

- F. W. Taussig's *Wages and Capital*.
 F. A. Walker's *The Wages Question*.
 W. J. Ashley's *The Adjustment of Wages*.
 C. F. Fay's *Co-operation at Home and Abroad*.
 N. P. Gilman's *Profit-sharing*.
 L. L. Price's *Industrial Peace*.
 D. F. Schloss's *Methods of Industrial Remuneration*.
 S. and B. Webb's *Industrial Democracy*.
 The Reports of the Labour Department of the Board of Trade on Profit-sharing and on Strikes and Lockouts.

CHAPTER IV

INTEREST

AFTER our long excursion dealing with the subject of labour and its reward, it may be well to pause a moment and place what is to follow in the right connection. It should then be recalled that under the general subject of distribution, or the division of the social income among the factors or agents that have worked in its production, we have now discussed rent, the share received by the owners of land, and wages, the share received by labour. We pass in regular order to a discussion of the share apportioned to the owners of capital. Land and labour, in their broadest sense, are the only original elements in production. Of course, we have explained, land includes not only building lots and farming land, but also mines and rivers and fisheries, and, in short, all natural unproduced agencies of production apart from labour. Capital, on the other hand, is not a primary or original factor, but secondary or derived.

Unlike land, capital is produced, but it is produced for the purpose of further production. In fact, we may define capital as the *produced instruments of production*.

How Interest is Determined.—Interest is the return to capital. By what law is its amount determined ?

This question has been continually discussed, and still appears to many economists an unsettled problem. The ancients in general denied that interest rested on any justifiable foundation. Aristotle thought it unjust, and Cicero classed it together with murder. Throughout the Middle Ages it was condemned by the Church and prohibited by statute. One of the main reasons for this attitude is found in the fact that until recent centuries little capital was loaned for productive purposes. Loans were usually made for personal consumption and for the relief of the distressed. The lender could not have used productively the amount loaned, and the borrower did not desire the loan for productive uses. Despite of public opinion and the law, however, the taking of interest continued to be customary wherever commerce was developed, and, with the industrial awakening in the modern period of capitalism, it was, of course, allowed as a necessity. Being allowed, it must needs be justified, and the explanations and justifications have been both numerous and various. Earlier economists explained the laws of rent and wages, and then naïvely concluded that capital took or received what was left. The owner of capital was thus made the "residual claimant" in distribution. Others have thought that capital and land receive returns according to fixed laws, and that labour is the residual claimant. The truth seems to be that no one of the three is a residual claimant, but that each receives a return determined by regular laws. What, then, shall we say is the special law by which interest is determined? In answering this question, we shall try to make a statement of the case which will reconcile conflicting theories, and at

the same time we shall indicate briefly what those theories assume.

Demand and Supply.—In the first place, it is probable that all economists would agree that interest, which expresses the value of the use of capital, is determined, like all value, by the relation between demand and supply. Where there is a strong demand for a limited supply of capital, its marginal utility will be high, and the capitalist can exact a large return in the form of interest. If the demand for capital be slight relatively to the supply, then the rate of interest will be low. Manifestly, however, this conclusion does not carry us very far. We must proceed to inquire what it is that determines the demand and the supply.

The Productivity Theory.—Investigation of the demand for capital brings us to a theory of interest which has been accepted widely,—the “productivity theory.” To the older economists, who regarded most economic questions from the standpoint of the business manager, it seemed sufficient to say that interest is paid because capital is productive, and that the amount of interest is determined by the degree of productiveness. From the side of demand we may allow that this productivity theory does furnish an explanation of interest. When capital is very productive there will be a great demand for it. But, while this theory explains in part why men *will* and *can* pay interest for the use of capital, it does not explain why they *must* do so.

The Abstinence Theory.—To understand why interest *must* be paid, we must investigate the subject of the supply of capital, and this brings us to the so-called “abstinence theory.” It has been said by some economists that interest is explained sufficiently when

it is described as the return or reward for abstinence. As we have seen, capital is the result of a special production made possible by saving. Saving or abstinence may not in any particular instance involve any great degree of suffering. Millionaires who do not consume at once and finally all that they possess are not thereby forced to suffer the pangs of hunger. It may be the case that they would find great difficulty in consuming any large part of their goods. But saving does mean, none the less, the consumption of less than the saver might consume. We cannot have capital if all men consume all the goods that they are able to obtain. It may help us to understand the relation between saving and interest if we represent actual saving as the result of varying degrees of self-denial. There are probably many persons who would rather put by part of their present goods, even if they could not thus obtain interest, or even if they had to pay a slight amount for the safe custody of their savings. If very little capital were required, therefore, the interest rate might fall to zero, as those who wished to save would be glad to lend their goods on a simple guarantee of repayment. But, if capital is highly productive and in great demand, it will not be possible to secure the desired capital from the savings of those whose abstinence means no sacrifice. It may, however, happen that when more capital is demanded, an increase which will bring the productiveness of the capital and the abstinence necessary to its formation into equilibrium, will be effected at a rate of one per cent. Suppose the productiveness of the capital to be still further increased. Then those who wish to engage in productive enterprises will be able to pay a higher rate and will

increase the demand for capital. But, other things being equal, those who would just save the needed amount of capital at one per cent. must be paid a greater price if they are to undergo the added sacrifice necessary to the accumulation of more capital. This explanation should make it clear that on the side of supply it is to the estimate of the *marginal investor*—the investor, or abstainer, who is just tempted to save the *marginal investment*, by the given rate of interest—that the rate corresponds. It is equally evident that all the savings that would be made for nothing, or that would be made at a lower rate, while they affect the rate very closely, do not directly determine it. We may say in conclusion, then, that interest is fixed on the side of the supply of capital at a point which just repays the sacrifice involved in the marginal investment. As we have already said, this rate, thus fixed, also renders the sacrifice of the marginal investor equivalent to the productivity of the marginal capital in use.

The Austrian Theory of Interest.—But what is it that determines the rate which the marginal investor will regard as repaying him, and just repaying him, for his saving or abstinence? This question has its answer in the theory of interest usually associated with the name of Professor von Böhm-Bawerk, one of the leaders of the so-called Austrian or psychological school of economists. To repeat our question in another form, Why is it that men—for instance, the marginal investor—will not give £10 now for £10 ten years hence, even though all risk should be amply covered by insurance? Why will not the marginal investor lend his money without interest even when the loan involves no risk? Simply because desire, which is the source of value, is

stronger for things near at hand than for those far away. And for the same reason he who borrows is willing to pay for £10 to be repaid a year hence more than the £10 which he borrows at the present moment. Interest is, in fact, a payment for the postponement of enjoyment, and such "postponement" furnishes an expression less open to abuse or misunderstanding than the expression "abstinence." The latter term at any rate should be used in a neutral sense, involving neither praise nor blame, and implying no permanent deprivation.

Human experience in a thousand directions furnishes abundant proof of this fact. The wants of men are like Esau's hunger. He would rather have—he values higher—a mess of pottage *now* than a whole inheritance *in the future*. "A bird in the hand is worth two in the bush." Distant enjoyments are vaguely realised by men's minds, while those near at hand are vivid and tempting. Thus it is that a man will rarely give present goods for future goods in like amount, because *future goods are less valuable than present goods*.

Yet it becomes apparent on a moment's reflection that there is the greatest difference among men in the comparative estimates they place upon the present and the future. This is in part (1) *a matter of civilisation*. Thus travellers have again and again pointed out that with primitive peoples there is the greatest recklessness and improvidence about the future. Hence, among savages, if interest were demanded or allowed at all, the rate would be very high. The comparative valuation of present and future enjoyments (2) *varies widely also among civilised men*. Some are almost as reckless of the future as the savage, while others would

be glad to exchange a quantity of present goods for a like quantity assured them in the future. The provident classes would therefore save even if the rate of interest should fall very low. Finally, (3) the comparative valuation varies widely according to *the affluence or wealth of the individual*. What we must have to satisfy the pangs of hunger to-day is evidently more highly valued than the same goods can be when they are to be obtained only at a future time. Other things being equal, then, the millionaire will, of course, overvalue the present less than his poorer neighbour. The man who has an income just sufficient to satisfy his physical requirements cannot save, no matter how high the rate of interest may be. And so we come back to our marginal investor, who *in the given state of civilisation is of such a temperament and is of such a degree of affluence or poverty that he will just invest the marginal pound's worth of capital when the rate of interest will repay his sacrifice, or, in other words, will make the goods which he is to possess in the future equivalent in his mind to the goods which he abstains from consuming in the present*.

Not the least among the contributions of the Austrian economists to the theory of interest has been their complete explanation of what they call the "technical superiority" of future goods, or capital, in the work of production. The point has been already noted in the discussion of the general subject of production, but it may be well to remind the student again at this point that—to state it summarily—*capital enables men to increase production by the use of natural forces which could not otherwise be used; and this use of natural forces is rendered possible by the fact that capital enables*

men to substitute roundabout for direct processes, and, as a necessary incident, to lengthen the average interval of production. Evidently, this technical superiority of future goods acts directly as a stimulus to the demand for capital.

Summary.—Let us now retrace the steps we have taken and state in summary form the theory of interest which is here developed. *Interest is determined primarily by the relation between the demand for capital and its supply, the rate being such as will render possible the widest use of capital in the existing state of demand and supply. The demand for capital is determined by its productiveness, measured by the value of the product. The supply is determined by the difference in the value of present and future goods in the minds of investors. The rate is therefore fixed at a point which will bring into equilibrium the productiveness of capital, measured by the value of its product, and the sacrifice involved in the marginal investment of capital, determined by the relative valuation of present and future goods in the mind of the marginal investor.*

Interest on Different Kinds of Capital.—For practical purposes we may distinguish three special loan markets which are temporarily affected by different conditions, and present at any time different rates of interest. (1) *Long-time loans* are usually loans of producers' goods. If money is the immediate subject of the loan, the borrower must convert the money into the form of capital which he desires. (2) *Short-time loans*, on the other hand, are usually loans of money for use as money. Men who have to meet money obligations want money and not goods when they borrow for the purpose. If they can only borrow other

goods, these goods must be converted by the borrower into money before he can satisfy his obligations. Such loans as these are an important feature in our large cities where bills of exchange and promissory notes are constantly falling due and must be met, and where the buying of stocks calls for large cash payments. Although these two classes of loans are subject to different conditions, they are bound in the long run to react on one another. Thus, if the rate for loans of long duration temporarily falls to a low point, while those of short duration command a high rate, producers' goods will be converted as rapidly as possible into money, and the money will enter into the market for short loans, thus raising the rate in the market for long loans and lowering it in the other.

The interest paid on (3) *loans of wealth which is not capital*,—that is wealth which is not used for purposes of further production,—is governed by the rate of interest paid for capital. It is the same percentage of value. The obvious reason is the power of the owner to sell his non-capitalistic goods and invest the proceeds in goods which constitute capital. If we should adopt the view that houses are not capital, but simply "consumers' goods," we should similarly have the rate of interest in this case governed by the forces controlling the rate of interest on capital.

Circumstances affecting the Rate.—There is both a real and an apparent fluctuation in the rate from place to place and from time to time. The apparent fluctuation is that due to the inclusion of insurance against risk in a single rate with real interest. Thus loans on good security always command a lower rate than others. This circumstance simply means that a man

who takes the risk of not getting his money back adds to *pure interest* a premium to cover that hazard. Gross interest, then, includes the two elements of net or pure interest,—payment for the loan itself,—and insurance against risk of loss, or of trouble in collection. Naturally, therefore, interest tends to be higher in uncivilised countries and backward communities. Again, loans of long duration usually command a rate slightly lower than loans of short duration, because with such loans the lender is saved the trouble of frequent reinvestment. Apart from these conditions, moreover, a steady diminution of pure or net interest occurs in most civilised countries. The change is due, not to lessened risk, but to the change occurring in mental comparisons of present and future goods. Present wants, being better satisfied, are less clamorous and contrast less vividly with future wants. Moreover, providence increases with civilisation. The lowering of the pure interest rate means that the great body of people are both less needy in the present and more thoughtful of the future.

Usury.—The word “usury,” once applied to all interest, is now applied only to that in excess of the rate allowed by law. The question whether laws should be framed limiting the rate to be received, and fixing penalties for violation, has been hotly discussed. Economists are now generally agreed that the State should not attempt to establish a rate, except so far as it can confine the action of the law to loans made to the needy for personal consumption. One effect of usury laws is worthy of special notice. When the law has established a fixed rate, under penalties, it may happen that law-abiding people will be unwilling to make loans at the legal rate, and that those who are ready to violate the

laws will thus have an additional reason for charging a higher rate than they otherwise would. Competition among lenders is lessened, and the risk of loaning is increased. Both these considerations act in the direction of excessive rates. Though many countries have laws designed to prevent the taking of excessive interest, the commercial world, which is regulated in great measure by the honour of its business men, commonly proceeds to disregard the law's penalties. Those who borrow at excessive rates do so willingly and knowingly, and are in honour bound not to appeal to the law to escape their just debts.

SUMMARY

1. Interest is the reward paid for the use of capital.
2. Capital differs from land in that it is produced. Social capital consists of all producers' goods.
3. Speaking generally, interest is determined by the relation between the supply of capital and the demand for it, at a point or rate which equalises the supply and the demand.
4. The demand for capital depends upon its productiveness, the value of its product.
5. The supply of capital depends in general upon its cost of production, *i.e.* upon the sacrifice involved in the abstinence or postponement of enjoyment of the marginal saver.
6. The cost of this arises from the fact that men regularly value the present more highly than the future, and the cost is therefore measured by the extent of this higher valuation.
7. Capitalistic production is more productive than non-capitalistic production because it enables men to substitute indirect processes for direct, and thus enables men to use natural forces.
8. Long-time loans and short-time loans, while affected by different sets of conditions, tend to yield the same rate

of return, and this rate is also that for the loans of other goods which are not capital.

9. The rate, as ordinarily stated, really measures the return for risk as well as the return for capital, which is pure interest. Both gross interest and pure interest tend to fall with advancing civilisation.
10. Usury, now applied to interest in excess of a legal rate, is frequently made subject to penalty. Such penalty, however, generally has the effect of raising rather than of lowering real interest.

QUESTIONS

1. What are the differences between capital and land ? The resemblances ?
2. What is interest ? How was the taking of interest regarded in early times ?
3. What is the supply and demand theory of interest ? What is the productivity theory ? What element of truth does it contain ? What is the abstinence theory ? What element of truth does it contain ? What is the Austrian theory ? Are these theories necessarily contradictory ?
4. State in summary form the complete theory of interest.
5. Is it right to say that the cost of capital is abstinence ? What is meant by marginal investment ? How do relative valuations of present and future compare in the case of children and adults ? Of children and savages ? Of rich and poor ? What relation has this to interest ?
6. Show in detail the services rendered by capital to production.
7. What different loan markets can be distinguished ? How does the interest rate in the first affect that in the second ? How is the "rent" of houses determined ?
8. What two elements are there in the ordinary rate ? What is pure interest ? What two reasons are there for a fall in the rate with advancing civilisation ?

LITERATURE

E. Böhm Bawerk's *Capital and Interest* (English translation).

CHAPTER V

PROFITS

ECONOMISTS recognise a fourth share in the distribution of the social income, though they have not agreed precisely of what this share consists, or how it is determined. Some writers have used the word "profits" to denote the total return to the entrepreneur from the sale of his product, after the payment of wages for labour employed and a further payment for land and capital hired. It is evident, however, that this return is not simple, but contains payments for several elements which call for separate treatment. We shall therefore speak of this return as *gross profits*, asking ourselves of what it consists, and we shall thus lead the way to an explanation of the net return which may be called by contrast *pure* or *net profit*.

I. Rewards of Other Factors or Agents of Production.—1. *Interest*. In the first place, it is evident that the return which the entrepreneur receives is in part due to the factors of production which he himself owns and uses in the business. The return to his capital invested is really interest as truly as if it were paid to another person who owned the capital instead of the entrepreneur himself. In estimating *net profits*,

therefore, careful bookkeeping will deduct from gross profits interest on capital invested by the entrepreneur.

2. *Rent*.—The same consideration, of course, holds true about land owned by the entrepreneur. Rent should be treated in the same way as that paid to an external landowner.

3. *Wages, including Wages of Superintendence*.—The element of wages and salaries of every sort, including an *amount regularly estimated for the entrepreneur himself*, should also for scientific purposes be separated from gross profits in the calculation of net profits. Private and public companies do this regularly, and the practice is frequent in other businesses in which the entrepreneur can be said to be “employed” like any other labourer.

II. Charges for Maintenance.—1. *Depreciation Fund*. In the second place, deduction must be made from gross profits of a sum sufficient to provide for the maintenance of the capital, or its replacement, as it is gradually used up, or suddenly destroyed. Modern business bookkeeping commonly provides for the replacement by keeping as a separate account what is called a *maintenance* or *depreciation* fund. A man is facing business ruin who takes and consumes as profits from his plant what should be set aside for its replacement.

2. *Insurance*.—The same may be said of the payment to provide against risk, which should be called *insurance*. The amount of money which a careful business man sets aside to secure himself against loss is not profit. Insurance in this sense is much broader than insurance against fire or burglary, for which a policy can be taken out and a definite premium paid. It must be noticed that when a separate charge is made

to cover such a risk the allowance for interest on the capital must leave out the part due to risk which we have seen to be present in gross or market interest ; in other words, the interest will in such a case be the *pure* interest.

III. Extra-personal Gains. — 1. *Monopoly Gains.* Even with these deductions, the analysis is not complete. We must, in the third place, deduct gains which are not due to the efficiency of the manager. One of these sources of gain consists in the possession of a monopoly. Monopoly gains are accordingly a separate item in distribution, and, if they are called profits, as frequently they are, we must carefully distinguish the particular nature of such profits.

2. *Chance Gains.*—Closely resembling monopoly gains in certain respects is a class known in recent discussions as *conjunctural*. As the name indicates, these are gains resulting from a favourable conjuncture of circumstances *which could not have been foreseen*. They are the result of chance or luck. A simple instance of such a gain is seen in the profits made by retail dealers when the sudden death of a great personage creates unusual demand for mourning wear. This happened in many English cities at the time of the death of King Edward VII. Stocks of black goods which the merchant may have blamed himself for accumulating may thus suddenly become the source of a considerable gain. Here, however, a very real difficulty is presented. In instances like that just mentioned, the element of luck or chance can be plainly distinguished. But it often happens that such gains are at least in part the reward of foresight and energy, and are therefore to be classed as pure or net profit. The man who makes a fortune

by buying up suburban property in an unlikely neighbourhood, because he has had sufficient sagacity to foresee the growth of population in that direction, may claim with some reason that his gain is not due to chance. Even more reasonable would be his claim if, after buying the property, he himself secured the movement of population in that particular direction by providing or inducing improved transit facilities and by other familiar expedients. In real life all the stages between clever business foresight and pure chance or *conjuncture* can be observed.

IV. Pure or Net Profits.—Our analysis, then, gives us as our concept of pure or net profits all that is left after deducting the items mentioned. Of course it will be understood that every business does not show in its gross profits all these different items. Sometimes it may even happen that no further deductions are required than those for wages and for a maintenance or depreciation fund. But some of the other items are usually present in the estimate of gross profits.

Society must at any time pay for its goods a price sufficient to give even the most inefficient manager whose services are necessary to the production of the supply, an amount covering the items other than net profits. But no pure or net profits will accrue to such a *marginal entrepreneur*. More efficient managers will, therefore, be able to secure *differential* profit, the amount of the difference being in every case determined by the extent to which these entrepreneurs individually surpass in efficiency the entrepreneurs of only marginal efficiency. Pure or net profit, therefore, is a purely personal gain—a return to superiority of management as such, independently of monopoly, of favourable

chance, or the mere labour of the manager as a superintendent.

Summary.—Let us summarise diagrammatically the considerations just presented :—

GROSS PROFITS	Reward to other factors of production	{ Interest on entrepreneur's capital. { Rent of entrepreneur's land. { Wages for entrepreneur's services.
	Charges for maintenance	{ Depreciation fund charge. { Insurance fund charge.
	Extra-personal gains	{ Monopoly gains. { Conjunctural gains due to chance or luck.
	Net profit— Personal gains	{ Differential or pure profits.

Pure Profit and Rent compared.—This explanation of the determination of pure profit as a surplus due to the superiority of a given entrepreneur over the marginal or poorest entrepreneur who can afford to stay in business at the current price of the product, is, as the student will doubtless have noticed, very like the explanation given previously of the determination of rent. Thus, *while wages and interest are price-determining*, entering into the price of the product, *rent and profits are price-determined*; they do not enter into the price of the product. Pure profit has hence been called, not inaptly, *personal rent*, or the rent of superior managing ability. Again, as with rent, it is interesting to notice the corollary that it is not the able managers, receiving large pure profit, any more than the fertile land, yielding large rent, that make the prices of commodities high. If all land were of the highest grade of fertility, the price of produce would be lessened; and in the same way, if all managers were of the same order of talent as our ablest managers, goods would be produced at

a lower marginal expense, and society would reap the benefit in lower prices. But there is this marked difference between the rent of land and pure profits. The more fertile lands can exercise little influence in raising the quality of inferior soils, while superior entrepreneurs are always tending to make the knowledge and skill requisite for success a matter of common property. As business becomes more completely organised, falling more and more into routine; as knowledge becomes diffused more widely throughout the business community; and as governments improve in regularity and firmness and honesty, the marginal expense of production and the resulting prices tend to fall, and profits in consequence tend to lower and lower limits. It is in this sense that profits may, as has been aptly said, be called "the lure that insures improvement."

Pure Profit and Monopoly Gains contrasted.—With sharp and increasing competition, pure profit rests on a precarious foundation. If the special ability upon which the profit depends is such as cannot be duplicated, the profit will, of course, perish with the single possessor; if the special ability can be duplicated, rival concerns will secure entrepreneurs of equal efficiency, and the special advantage then tends to disappear through competition. But, as we have said, there are certain permanent extra-personal advantages, entirely equivalent otherwise to natural ability, which may become the exclusive and permanent property of a business organisation. In the case of such possession, competition is either wholly impossible or it is only possible on terms which give to the holder of a monopoly a considerable differential return. Such an advantage exists in the possession of peculiarly favoured plots of land, or of exclusive guaranteed privileges, etc. When such an advantage is enjoyed, the power of competition

over price is removed ; prices no longer stand at the point of cost ; and a surplus over rent, wages, interest, and profits is a regular result. Unless interfered with by legislation, there could be no outside influence to prevent a monopoly asking any price it pleased, subject only to the action of that law of monopoly price which has been explained in the chapter on Monopolies.

Another sharp contrast between pure profits and monopoly gains is discovered in the fact that whereas pure profit is a surplus *produced by superior efficiency*, and is so far no burden to the community,—which, indeed, tends to gain by it in the end,—monopoly profit, on the other hand, is a surplus *extorted by power and privilege*, and is usually a source of loss to the community. Distribution of wealth seems to be passing more and more under the influence of monopoly. The economic surplus taken by monopolists is the source of many of the largest fortunes in our day, and is one of the main causes of the growing inequalities of fortune. *While, in general, competition increases in severity, an increasing proportion of the industrial field is withdrawn from competition and falls under the control of monopoly.*

Capital and Capitalisation.—In considering monopoly gains, it is important to understand the distinction between capital and capitalisation. *Capitalisation means the amount at which a business or property is valued.* The word is therefore used in the language of the market in two senses. It is sometimes used to describe the par value of the stock and other securities issued by a company, as representing the *company's nominal valuation* of the business and its earning power. And it is also used to denote the market value of the business or of its securities taken as a whole. Thus a

company may be capitalised at £2,000,000 in the sense that its securities have that par value, while the market estimate of the value of the business, as reflected in the prices paid for its securities, may be much less or much more than £2,000,000. Capitalisation in either of these two senses may be many times the amount of capital actually invested, since it is based not on investment or material cost, but on earning power.

When we speak of current interest as being 5 per cent., we mean that free and disposable capital can regularly command that rate of return in competitive industry. Let us suppose that the return on investments open to all is about 5 per cent., while the annual return to a great oil company, which has actually invested £20,000,000 in the business, is 50 per cent. The business may in that case be capitalised at £200,000,000, in such a way that the great earnings on the *actual investment* will appear as only 5 per cent. on the *capitalisation*. To those ignorant of the difference between capital and capitalisation, monopolies can often, by such a plan, appeal successfully for sympathy and support on the ground of insufficient earnings, even when the return on their actual investment is many times the market rate.

As profits on new investments in competitive industries fall, the capitalisation of monopoly earnings may be raised in proportion, even without the investment of new capital. For instance, if a monopoly has an earning power of £10,000 a year, the capitalisation of this return at 5 per cent. would stand at £200,000. If, then, the current rate of interest should fall to 4 per cent., while the monopoly earnings suffered no change, the capitalisation of the monopoly, represented by the *market value* of its securities, would rise to £250,000.

And yet it must be remembered that the owners of the stock or shares in monopolistic businesses often include many persons who have paid on the basis of the capitalised value, and do not therefore receive from the monopoly a greater return than they would receive from investments in competitive industry. It is those who, as it is said in the slang phrase, "get in on the ground floor," and are thus enabled to sell at the capitalised value stock or shares which they have received on the basis of actual investment, who divide among them the capitalised monopoly earnings.

SUMMARY

1. The word "profits" as ordinarily used in business often includes many elements of income which are not really profits. The total surplus left in the employer's hands after the payment of wages, rent, and interest should be called gross profits.
2. To obtain the net profits of a business there must be subtracted from the gross profits (1) a normal return for the employer's own capital, land, and services, *i.e.* interest, rent, and wages of superintendence; (2) charges for maintenance, including depreciation and insurance; (3) extra-personal gains, including those arising from monopoly or from chance.
3. The remainder, or the pure net profit, is a differential return due to the superior ability of the entrepreneur, and is in many respects comparable to rent.
4. Pure profits tend to diminish, other things being equal, as education becomes more widely diffused and as industry becomes more completely organised under regular routine.
5. Monopoly profits, on the other hand, have a more permanent character in the absence of government interference.
6. Under the modern conditions of business, monopoly profits are disguised by their form of capitalisation.

QUESTIONS

1. What are gross profits ? What is the difference between gross profits and pure profits ?
2. Name the deductions that must be made from gross profits to arrive at net profits.
3. What deductions should be grouped together ? What are the other groups ? What is the basis of this grouping ?
4. What is meant by wages of superintendence ? Some writers call wages of superintendence marginal profits : explain.
5. What is the depreciation fund ? Insurance fund ?
6. What are the two classes of extra-personal gains ? What is meant by the word "conjunctural" ? Mention instances of "conjunctural" gains that have fallen under your observation or that you have met with in reading.
7. What caution must be observed in estimating "conjunctural" profits ?
8. Why are pure profits like rent ? How do pure profits and rent compare in their tendency to increase or decrease ? What effect does competition have in the long run on pure profits ? On monopoly profits ?
9. Why is it that monopoly profits often appear to be only equal to the normal interest rate ? What bearing does this have upon popular opinion regarding monopolies ?
10. What is the difference between capital and capitalisation ? Explain the process of capitalisation.
11. What is the effect of a falling rate of interest upon the share of the social income that accrues to monopolies ? Why ? What is the effect upon the value of a monopoly privilege ?
12. What bearing has this upon the question of the attitude which the people should assume toward monopolies ?

CHAPTER VI

SOCIALISM

The Relation of Socialism to Distribution.—In the preceding chapters we have explained how in the existing social organisation the annual produce of industry—the social income—is distributed. As we stated at the outset, the method of distribution is intimately connected with the legal structure of society, and particularly with the laws of property. Society, as it exists in all advanced nations, accepts private property as its economic basis. In other words, in the great majority of goods, private proprietorship or private appropriation is not only permitted but encouraged, and the result is the system of distribution which has been described.

There are considerable differences in the laws about property observed by different nations, and minor changes are constantly being made; and these differences and changes result in corresponding differences and changes in distribution. It would take us too far afield to attempt to treat of them in detail. But Socialism, which may be described as a plan for destroying the very foundation of our existing economic organisation, has been proposed and discussed so seriously, and commands to-day so many enthusiastic

advocates, that we cannot pass it by in silence in our analysis of economic theory.

Such a fundamental change as socialists propose would, we shall see in the following pages, profoundly affect every one of the four phases of economic activity which we have chosen as the natural divisions of economic analysis,—consumption, production, exchange, and distribution. But socialism has been put forward more particularly as a remedy for existing evils in the distribution of the social income, and we may therefore treat the subject properly under that head. It may be noted in passing, moreover, that in general discussions of the proposed change it is commonly assumed that labour and wages would be especially affected, and socialism is therefore often handled in direct connection with the subject of wages and plans for improving the status of labour.

General Characteristics.—In the chapter on Wages and the Labour Problem we have described some of the various changes in the relation of the labourer to the product of his labour that have been tried or put forward. It was there pointed out that one of these plans, co-operation, may be either voluntary or coercive,—that is, ordered and controlled by the State,—and it was also said that coercive co-operation was but another name for socialism. What, then, is socialism? It is, in fact, coercive or compulsory co-operation, not merely in undertakings of a monopolistic nature, but in all important productive enterprises. Socialists seek the establishment of *industrial democracy* through the agency of the State, which they hold to be the only instrument for accomplishing their end. They would expand the business functions of Government until all

dominant kinds of business are absorbed. They would have all such business regulated by the people in their organic capacity, every man and every woman having essentially the same rights as any other man or woman. Our political organisation would become also an industrial organisation, with universal suffrage. Private property in profit-producing business and rent-producing land would be abolished, although private property in incomes would be in the main preserved. What is desired by the socialist, then, is not, as is supposed by the uninformed, a division or diffusion of property, but rather an increased concentration of a very large part of property. The socialists do not complain that productive property is amassed too much, but they object that it is not yet sufficiently concentrated. They therefore rejoice in the formation of trusts and combinations, regarding them as a development in the desired direction.

The Four Elements of Socialism.—There are four characteristic features of pure socialism: first, the *common ownership of the means of production*; second, the *common management of the means of production*; third, the *distribution of the product of industry by common authority*; fourth, *private property in the greater part of income*. Socialists make no war on capital, strictly speaking. What socialists object to is not capital, but *the private capitalist*. They desire to *socialise* capital and to abolish capitalists as a distinct class by making everybody, as a member of the community, a capitalist; that is, a joint owner of substantially the whole of the capital in the country.

In support of this plan, socialists generally claim that labour creates all wealth. No rational socialist means

by this to deny that land and capital are factors or agents of production ; but, as they are only passive factors, the socialist holds that their owners should not receive a share of the product simply through such ownership. Man is the only active agent, and all production is conducted for the sake of man. Socialists admit that, with industry organised as it is now, the owners of land and capital must receive a return ; and hence they desire that these tools should become social property.

Distributive Justice.—The central aim of socialism, its pivotal point, is *distributive justice*. While it seeks to increase production by more efficient organisation and better methods, its leading thought is the just distribution of the product. The ideas of socialists on the question of what constitutes justice in distribution are not harmonious. Some say that (1) *equality* meets the claims of justice ; others urge (2) *distribution in proportion to real needs*, so that each man may have the economic means for his fullest development ; while yet others say that justice demands distribution (3) *in proportion to merit or service rendered*—but *that the service must be that of the individual, not of his ancestors*.

Socialism an Extension of Existing Institutions.—Our Government now monopolises the postal service, the telegraph, and the telephone ; nearly all governments, local or central, control the roads ; some own canals and railways ; many even possess factories of various kinds, and probably every national government does at least a little manufacturing ; many of them also plant forests, and some cultivate arable land. In brief, we may say that Governments already touch the business world in the following ways : (1) *they*

protect person and property ; (2) they create and guarantee certain special privileges ; (3) they regulate the terms of contract and of competition ; (4) they participate in private enterprises by favourable tariffs, bounties, subsidies, etc. ; (5) they carry on certain industrial processes, such as the construction and maintenance of roads, parks, lighthouses, telegraphs, coins, etc. To picture to ourselves socialism pure and simple, therefore, we have only to imagine an extension of what exists already until a point is reached where society, through its government, cultivates the land, manufactures the goods, conducts the exchanges, and in short prosecutes most *productive enterprises*. Such private industry alone would be permitted as would not threaten the dominating power of society in production and in distribution. Thus individuals would probably be allowed to cultivate small areas of land, and here and there there might exist a private printing-press perhaps supported from private income.

All Public Business is not Socialistic.—It must be observed that it is not every public activity in relation to industry which is socialistic. Properly speaking, *that only can be considered socialistic which tends to render Government dominant throughout production.* Does any proposed measure tend to the suppression of production by individuals or by voluntary co-operation, and to its absorption by this Government ? Then it is socialistic ; otherwise it is not. This is the only way to distinguish between socialistic and non-socialistic, or even anti-socialistic measures. It furnishes us with a rational ground for judgment. Are compulsory education and free schools socialistic ? By our test they are decidedly anti-socialistic. By developing capacity for

self-help they enable those who grow up under their influence to make the best of existing institutions. They are, indeed, a conservative force. Is municipal ownership of gasworks, electric-lighting works, or other natural monopolies, socialistic? No; for they accord with the modern tendency to separate sharply the proper industrial functions of private persons from the proper industrial functions of the organised community. There is a sound principle—not socialistic—underlying the modern tendency. The conviction is gradually being forced both by theory and by experience that most of those industries which are natural monopolies will in the end be owned and worked by Governments, and that outside the field of natural monopoly there is a territory sharply defined in which business can flourish only in the atmosphere of private enterprise and competition. If we separate thus frankly and rationally the private from the public industrial sphere, we lay firmly the strongest possible foundation for the existing industrial order, instead of allowing men to drift haphazard into socialism or chaos.

Socialism makes perhaps its most powerful claim when it pleads, first, for a *scientific organisation of the productive forces* of society, and second, for a *just distribution of the social income* from production.

1. *The Relation of Socialism to Production.*—When the opponent of socialism objects to that system on the ground that a more equal division of the social income would result in portions pitifully small for each individual, the socialist replies: “There is little to divide now, naturally enough. Competition is wasteful. Two railways run where one would be enough. Three times as many milk waggons, horses, and drivers are required

to serve the people with milk as would amply suffice if the business were organised on the plan of the distribution of letters and parcels. Look at the shops, wholesale and retail, and note the waste of human force. Millions of pounds are expended annually in advertising, and this sum would be saved in the socialistic state. Without competition the whole drapery and grocery businesses could be conducted with a third of the present expenditure of economic energy. Reflect, too, on all the idle classes in society, both the idle rich and the idle poor. Socialism would find a place for every man, and would put all into their proper place, and by making each dependent on his own exertions for success, would stimulate our energies." The socialistic argument, continued indefinitely in this strain, is telling. It does not prove the point, however, unless we grant three assumptions: first, *that present waste and idleness cannot be suppressed altogether or diminished greatly without departing from the fundamental principles of our existing industrial order*; second, *that in the advantages of competition there are not social gains which more than outweigh the social losses just described*; and third, *that socialism is practicable*.

2. *The Relation of Socialism to Distribution.*—*Distributive justice* advances also a strong plea for the adoption of the programme of socialism. It cannot be claimed for a moment that every man's income is now adjusted to his social service. An income proportioned to desert appeals to a sense of right and fitness; but cannot we approach more closely to that ideal than at present through social reform, without going to the extreme of social reorganisation? No doubt the idle man is morally a thief. He receives,

but in return he gives no personal effort. Any man who has not earned the right of repose by his own past services, with fruitful physical or mental toil, is a shameless cumberer of the earth, unless, indeed, he is incapacitated for useful employment. Would the world suffer by your death? That is the test. If you merely throw the dice from the box at some game of chance, you would be missed by none.

Social Obligations of Wealth.—We may derive hope from the fact that men everywhere are coming now to recognise the social obligations resting on the individual. Dr. James Fraser, late Bishop of Manchester, expressed the idea in words the essential thought of which is this: "Most of us are compelled by our necessities to render service to our fellows. Some of us, however, have inherited or received money in some way without a return on our part. We are placed by God on our honour. It becomes a matter, not of physical compulsion, but of honour for us to serve our fellows." What is here said would apply also to those who become wealthy through the accidental discovery of valuable treasures, such as oil, natural gas, or gold on or under the soil which they own, or through the growth of cities, which adds immensely to the value of favoured land. Were you to receive an accession of wealth in such a way, the wealth would be yours in the eyes of the law, but morally it would be simply a new opportunity for helping the progress of humanity. It is the clear realisation of this idea that leads men of wealth, especially in America, to endow so generously universities and other institutions for the public welfare. This idea is contained in the epigram, now famous, of one of our richest manufacturers, "To die rich is to die disgraced."

3 and 4. *The Relation of Socialism to Exchange and Consumption*.—We cannot find the space necessary to discuss all the economic changes that would appear in a socialistic state. It must suffice merely to note that exchange and consumption, as well as production and distribution, would be revolutionised. A credit-economy might supersede entirely our present mixed money and credit economy, and socialism, to be consistent, would have to make exchange values accurately proportionate to costs in human labour and in other sacrifice. Moreover, equitable distribution of a product largely increased, if it could be achieved, would of course be reflected in the amount and character of the goods consumed. Particularly, it may be supposed that inclusive or common, as contrasted with exclusive, enjoyment of wealth would fill a much greater place in the life of a people socialistically organised.

The Weakness of Socialism.—In considering socialism as a scheme for social reconstruction, a number of difficulties are suggested. Prominent among these is (1) the probable numbing effect of the system upon individual initiative and energy. What motive to activity can take the place of the desire for individual and family advancement through the accumulation of private property? Another very grave difficulty lies in (2) the introduction of the requisite unity in the organisation and management of industry. In some industries where the work is of a routine nature, the problem of organisation may not be impossible of solution. But what shall we say of such industries as agriculture, which has hitherto resisted all efforts at centralisation? In the third place, (3) the socialist state would have the herculean task of apportioning

work of all conceivable degrees of difficulty and disagreeableness among the workers. How could this be accomplished without engendering a universal discontent that would be fatal to the plan at its first inception ?

Again (4) the danger to personal freedom under the proposed system seems very real. Up to a certain point, it is true, Government seems to improve as its functions increase in number and importance. But would this hold true indefinitely ? We may even grant, for argument's sake, that, as our very livelihood would depend on the efficiency of Government, all the force and energy that are now expended in private service would be diverted into public channels. But what would happen if, in spite of all precautions, some unscrupulous combination should secure control of the State ? Would there remain, inside or outside of the Government, standing ground for effective, yet pacific, opposition ? It is to be feared that there would not. Dissatisfaction would exist, for human nature is such that man cannot be thoroughly satisfied with his surroundings. The danger is that, without proper means for its expression, this dissatisfaction would grow and spread beneath the surface of society until, having no other vent, it would at last issue in revolution.

Finally, we may lay down the general rule that (5) the domination of a single industrial principle is dangerous to civilisation. Many writers have pointed out that it was the dominance of a single social principle that led to the downfall of the old civilisations. What is needed is a co-ordination of the two principles, —the principle of private and of public business. It is desirable that some should serve the public in an official

capacity, for some men are specially adapted for that work ; but it is equally desirable that an ample field should be left for those who prefer private initiative and activity. Our present system, much as it may need reform, offers opportunity for co-ordination of these two principles ; socialism would not.

But it is as difficult to predict the ways in which socialism would fail as it is for the socialists to say definitely how it would work, and this suggests their real weakness : they venture to forecast the course of economic evolution too far in advance. Certainly we must have ideals and look forward to the future, but we are unable to say very long beforehand what will be the best means for attaining these ideals. The hope that a juster distribution of wealth will prevail, and that income will represent more and more fully social service, is cherished by many who do not call themselves socialists, and believe it wise to concentrate their efforts on practicable social reform.

Our Debt to Socialists.—Socialists have rendered society a real service by calling attention to pressing social problems ; by forcing us to reflect upon the condition of the less fortunate classes ; by quickening our consciences ; by helping us to form the habit, not yet generally acquired, of looking at all questions from the standpoint of public welfare and not merely from that of individual gain ; and finally, by calling our attention to the industrial functions of Government, thus leading us and aiding us to separate rationally the sphere of private industry from that of public business.

Socialism not Anarchism.—Socialism has been described as industrial democracy established and controlled by Government. It is evident, therefore, that

the socialist would give to Government the greatest possible authority. At the opposite extreme stands a proposed system which is strangely enough often confused by the ignorant with socialism. *Anarchism would do away with Government entirely, leaving all activity to individuals acting voluntarily : socialism, as we have seen, would lessen the sphere of individual initiative, leaving the greater part of industrial activity in the hands of Government.* In the main, therefore, anarchism and socialism are antithetical. Yet there are some anarchists who believe that, were Governments abolished, individuals would freely of their own accord form co-operative groups which, federated, would manage all production. Anarchy is, in the minds of most thinking people, inconceivable.

Communism and Socialism.—*Communism* is a term which is not much used in recent writing. In the past it was employed to designate an extreme kind of socialism. Communism required equality of possessions and of income, without much regard to the matter of the regulation of production. Some writers have used the word “communism” to designate violent schemes of radical social reform as distinguished from the more peaceful and conservative plans of reconstruction, which they intend by the name socialism. Yet all the communistic societies in the United States are composed of pacifists, who do not believe in war, and even preach non-resistance to aggression. It is as well, perhaps, to abandon the attempt to make a permanent distinction between communism and socialism, by simply discarding the word “communism.”

Other Names for Socialism.—*Collectivism* is a name which many socialists of recent years have favoured

as a designation of their programme. Sometimes they have chosen the term in order to escape the odium which the ignorance of past years has attached to the older word. Other titles used to describe socialists in one or another of their groups are :—*Fabian Socialists*, the name applied to a group of English socialists and their followers who have adopted as their rule of action “ Make haste slowly ” ; *Christian Socialists*, the name applied to those who base their argument and their hope upon the Christian gospel ; *Scientific Socialists*, the name applied to the followers of Karl Marx, who in his large work, *Capital*, tried to show that socialism is destined to arrive in its time, whether we will or no, through the evolution of great underlying forces in industrial society.

Perhaps the larger part of political socialists in Europe and America—socialists who advance a political programme and support regularly their candidates for office—are still Marxists. But the name under which the political movement has made the greatest progress in Europe, and especially in Germany and Belgium, is Social Democracy, the partisans being known as Social Democrats ; and Revisionists among their number have discarded many of the theories and some details of the historical picture drawn of the past and of the anticipation formed of the future by Karl Marx. In opposition to this spirit of compromise we find the French Syndicalists, who believe in the “ war of classes ” and the “ general strike,” and would commit the ownership and control of each industry to the workmen organised in syndicates or trade unions, and loosely bound together in the C.G.T. (the “ Confédération Générale du Travail ”).

Present Status of the Socialist Political Movement.—

Socialism as a general political movement has been making rapid strides in Europe within the last few years. It is impossible to form an accurate estimate of the aggregate number of political socialists at the present time, but certain figures are available which indicate the quick growth and present status of the party. Thus in the German Empire the number of votes cast for socialist candidates for the Reichstag rose in the sixteen years, 1887 to 1903, from 763,128 to 3,011,114. This represents a change from 10·1 per cent. to 31·7 per cent. of the entire vote of the Empire. In 1912 the figure was 34·9 per cent., the total of votes was 4,250,329, and, while the actual number of Social Democratic members in the Reichstag was 110, according to the voting power of the party it should have been 131. Ninety-three newspapers, with a circulation of 1,800,000, belong to the party.

In Italy, in 1909, 40 socialists were elected to Parliament by 338,865 votes ; in Austria, in 1911, there were 82 socialist members of the Lower House, and in Vienna alone 20 of the 33 representatives were socialists. In Belgium, where the movement has in some respects had its greatest success, the total vote rose from 335,000 in 1894 to 476,862 in 1902, and the number of representatives in the National Parliament in 1912 was 39. The strength of the movement in France cannot be shown so easily on account of the numerous factions into which the party is there split ; but the fact that M. Millerand, a socialist, found a place in the Cabinet formed in 1901, and M. Briand, another former socialist, became Prime Minister subsequently, to be followed at a later date by M. Viviani, is perhaps more significant

than many figures. In 1910, 76 socialists were returned to the Chamber by a vote of 1,125,877 persons. In England, where large parties have always been few in number, socialism has shown a tendency to avoid the ordinary political channels. The same is true of the United States, although in recent state elections, and even more in municipal elections, surprising gains have been made by organised socialists. In 1902 the total socialist vote in State and Congressional elections was 283,525.

SUMMARY

1. Socialism is coercive co-operation in production.
2. Socialists would permit private property in income, but not in means of production.
3. Socialists claim that labour produces all wealth, and they aim at a distribution based on justice.
4. Socialism is but an extension of existing institutions.
5. The strength of socialism lies in its suggested saving of waste, in its proposal for a juster distribution, and in its demand for the recognition of the social obligations of wealth.
6. Its weakness lies in its requirement of impossible human virtues.
7. Anarchism is really the opposite of socialism.
8. There are many differences of view among socialists, these differences giving rise to distinct names for the different groups.
9. The political socialists have increased rapidly in number in Europe during recent years.

QUESTIONS

1. Define Socialism : Anarchism. What is Christian socialism ? Evolutionary socialism ? Fabian socialism ? Name prominent poets and novelists and politicians who

2. How far does socialism abolish private property ?
3. What effect would socialism, if successful, have on production ? On distribution ? On exchange ? On consumption ?
4. What difficulties stand in the way of the realisation of socialism ?
5. Why is it not right to say of every public interference in industry that it is socialistic ? When may a measure be called socialistic ?
6. What is the origin of wealth according to socialists ? Discuss this claim.
7. Why is anarchism not feasible ?

LITERATURE

- R. T. Ely's *Socialism and Social Reform*.
E. C. K. Ensor's *Modern Socialism*.
T. Kirkup's *History of Socialism*.
J. Rae's *Contemporary Socialism*.

BOOK IV

PUBLIC FINANCE

CHAPTER I

EXPENDITURE AND REVENUE

I. INTRODUCTORY REMARKS ON THE NATURE OF PUBLIC FINANCE

Definition of Public Finance.—Public Finance is *the science, or the branch of Economics, which deals with the revenue and expenditure of Governments, and with the administration of such revenue and expenditure.* It should be carefully distinguished from *private finance*, concerned with the revenue and expenditure of an individual or a private business, and from *corporation finance*, which treats of the revenue and expenditure of private corporations or companies. The student is also cautioned against confusion with the subjects of money and banking, which belong to another part of Economics.

Early treatises in English Economics had usually no special section devoted to public finance, but included some observations on taxation in their treatment of other general topics. It is true that the difficulty of saying anything adequate about so vast a subject, within

the limits of a few pages, is serious ; yet it does not seem scientifically satisfactory to pass by the most important economic topics, even in an elementary treatise. We shall therefore attempt to give some idea of the nature and the scope of public finance, while we remind the student that later and more careful study of the subject should be pursued with the help of some text-book entirely devoted to the matter.

The Magnitude and Influence of Public Business.—The business carried on by Government is the largest single business in every great nation. In England to-day, a few men have fortunes reckoned in millions, and we rightly regard these fortunes as colossal if they amount to five million pounds ; and yet the annual revenue of the Central Government alone is now more than two hundred millions. The total receipts of the British Exchequer for the year ending the 31st of March, 1913, were £231,426,763. The total gross revenue was £188,802,000.

So vast and so permeating is Government business that it affects vitally all other businesses. Government to-day is the largest single employer of labour, and hence profoundly influences the conditions of employment generally.

Different Views of the Economic Functions of Government.—It is clear that the dominant idea of the true function of Government will determine the character and extent of Government business. In an anarchist society—if there could be *society* in anarchy—there would be no public finance. In a State limited to the functions allotted to it by the extreme individualist, public finance would be relatively insignificant. In a socialist State, public finance would so

overshadow private business and finance that Economics and Public Finance would almost become identical. The character and scope of Government business in the modern State will appear in the following pages.

II. PUBLIC EXPENDITURE

The Magnitude of Public Expenditure.—The importance of public finance becomes more apparent when we consider the magnitude of Government expenditure in modern times. The fact has often been cited that England's expenditure increased forty-fold between 1685 and 1841, while her population was increasing but threefold ; but this is only one of many facts equally significant. Within the quarter of a century elapsing between 1888 and 1913 that expenditure more than doubled. The French *budget*—the name applied to the *detailed statement of revenues and expenditures*—showed expenditures of a thousand million francs in 1821 for the first time, and the result was widespread alarm ; and yet no French budget since that time has called for smaller expenditure, and now the total annual expenditure of France and her minor Governmental divisions amounts to more than five times the figure of 1821. In the United States in 1792 it was but two dollars per head of the population, in 1902 it was little less than six dollars per head. The annual *national* expenditure of Great Britain, after a slight decrease following the Napoleonic wars, has grown regularly since, rising from about £47,000,000 in 1833 to more than twice that sum in 1893 ; while it was almost twice the second amount in 1913.

Causes of Growth.—It must not be thought that this great increase in public expenditures is due to recklessness or dishonesty. Probably, on the whole, Government has improved during the last century; and it is significant that, where Government is most undoubtedly honest, there have been larger increases than in many other quarters. The explanation of the increase is not difficult to discover. In the first place, we must remember that population has been growing rapidly, and that increase in aggregate expenditure does not mean a proportionate increase in the burden borne by individuals. But besides this, we must conclude that Government activity, if we include Local as well as central Government, while wiser than before, is also more extensive and important. Schools, provision for public health, public parks, public baths, public libraries, all show plainly the enlarged range of State activity in modern times. With some unfortunate exceptions, these increased expenditures are a sign of health, and do not indicate any tendency on the part of Government to absorb an undue proportion of the industrial life of the nation.

This can hardly be said, however, of the great growth of expenditure on military and naval equipment. Whether these expenditures have been wisely or unwisely made, it is at least regrettable that so large a proportion of the civilised peoples' expenditure is due to past wars and to the preparation for future war. The burden of this expenditure alone for the United Kingdom amounted in 1912-13 to $72\frac{1}{2}$ million pounds for the Army and the Navy, and to a further $24\frac{1}{2}$ millions for the National Debt. This was in time of peace.

Classification of Public Expenditures.—So numerous are the objects of Governmental expenditure that it is manifestly impossible to treat the subject exhaustively within the limits of our space. We must content ourselves here with a consideration of some of the more important classes into which such expenditure naturally falls.

1. *Expenditure for Fulfilling the Protective Functions of the State.*—Of the general class of expenditure incurred in fulfilling the protective function of the State, the first to be mentioned is that (a) *for security from foes without the State*. Under this head comes the cost of the army and navy. Until recent years, this item in the budget of the United States of America has been relatively unimportant; but in European countries a very different position is discovered. Financial statesmen have been much concerned about the problem confronting them in providing for the national defence. The direct cost of that defence includes the pay and equipment of troops, and outlay on ships, and cannon, and ammunition, etc. The indirect cost is represented by the great waste of resources and opportunities for labour in times of war.

(b) *Internal Security.*—Under expenditure for internal security is included the cost of the police system in all its branches,—including policemen, etc.,—and that of the judiciary system, for both of these are occupied almost wholly in securing persons and property from injury.

(c) *Expenditure on the Poor and Unfortunate.*—Every civilised Government recognises an obligation to extend relief to paupers, and to those who, from natural defects, are unable to hold their own in the struggle for existence. The problem of assisting such classes is receiving an

increasing share of attention from thoughtful people everywhere.

2. *Expenditure for Fulfilling the Commercial Functions.*

—A second general class of expenditure consists of the outlay incurred in fulfilling the commercial functions of the State. Among such is expenditure (a) *for the construction and maintenance of such instruments and institutions as roads, bridges, canals, and riverways, harbours, light-houses, etc.* (b) *The post-office and telegraph and railway lines* are also commercial as well as educational in their purpose, but they are generally treated as self-sustaining or remunerative investments, even when they are under the ownership and management of the State. A similar expenditure for commerce is that (c) *for maintaining a currency and systems of weights and measures.* (d) *Expenditure for the consular service* also falls under the same general head. To a less degree the same may be said of the diplomatic service, though in this case the purpose of the service is perhaps primarily for maintaining international peace.

3. *Expenditure for Fulfilling the Developmental Function.*—The third general class of expenditure consists of that incurred in fulfilling what we may call the developmental function of the State. Most important here is (a) *the expenditure on education.* Of all classes of expenditure that on education has grown most constantly and rapidly in the modern State. Especially has such expenditure increased with the spread of democracy. It is felt everywhere that democratic institutions find their best safeguard in a high average of enlightenment. Moreover, there is reason for believing that even more directly expenditure on education is justified as a productive investment by the

increased earning power and the improved consuming strength of the people, to which it contributes. Under the head of education come not only the education in the schools, but also that which is to be gained from art galleries and museums and other agencies for the promotion of culture. It is a mistake to regard these merely as amusements for the idle hour. They should be, and for many individuals they, in fact, are, indispensable adjuncts to books and to the schools in securing a higher education.

Other expenditure belonging to the same general class includes that for (b) *public recreation*, for (c) *investigation*, and (d) for *maintaining equitable conditions for private business*.

4. *Expenditure for the Maintenance of Government.*—The modes of expenditure we have been considering are, of course, modes of expenditure *by* Government: we have now to mention a fourth general class,—the expenditure *for* Government; that is, expenditure for Governmental functions too general and fundamental to be ranged under any of the heads that we have before mentioned. Such are the expenditure for (a) *legislation and administration*, and for (b) *tax collection*.

Objects of Public Expenditure.—It is not customary for Governments to classify their expenditure as we have done, or in any such way as will show accurately what the Government pays for the objects which we have discussed. But a careful study will reveal that the greater part of the expenditure of the Central Government is on the protective and commercial functions, while the greater part of the expense of what we have called the developmental functions rests with Local Government. The division made is not

absolute ; and suggestions have been recently advanced for meeting more completely from the National Exchequer the burden of local outlay upon objects of national importance. As it is, various "grants-in-aid" have been made for certain purposes.

It is also interesting to note the relative growth of expenditure in the different divisions of the Government. Generally throughout the civilised world an increasing proportion of the aggregate expenditure is being made by Local Government, from which it would appear that the greatest increase of Governmental activity occurs where Government is most directly and most closely watched and administered by the people themselves.

III. PUBLIC REVENUE

Classification.—Differing classifications of public revenue have been almost as numerous as the writers who have made them. Without entering into a discussion of the reasons for such differences, we may present at once a classification which is in general harmony with the usual treatment of the subject.

A. Permanent Revenues.

I. Regular revenues.

1. Derived directly from Government ownership.
 - a. Revenues from public domains.
 - b. Revenues from public industries.
 - a'. Industries publicly owned and managed.
 - b'. Industries publicly owned, but managed by lessees under a charter.
2. Derived from the incomes of private persons and corporations.
 - a. Fees.
 - b. Special assessments.
 - c. Taxes.

- II. Irregular and miscellaneous. Fines, forfeits, escheats, gifts, etc.
- B. Temporary Revenues. (To be repaid.)
 - I. Public loans by the sale of bonds.
 - II. Public loans by the issue of treasury notes.

Miscellaneous Revenues.—The class of miscellaneous revenues includes gifts, fines, forfeits, escheats, “conscience money,” etc. *Escheat* is a legal term used to describe a property that falls to the State in default of other heirs. Conscience money is money sent anonymously by those who have before defrauded the Government.

Gifts still amount to more than is supposed, although they form a source of revenue relatively unimportant. Formerly they were made not infrequently for the general expenditures of Government. Less than a quarter of a century ago, a citizen of New Jersey, for example, left the United States nearly a million dollars to be applied to the payment of the national debt. But gifts are now offered more commonly for special purposes. Thus Mr. Smithson left the same United States half a million dollars to be used in the foundation of the Smithsonian Institution for the Advancement of Science.

Public Domains.—Public domains are a source of considerable revenue in Germany and some other countries. It has generally been thought best that Governments should not retain agricultural land, and to-day there is no great amount of arable land which is possessed by Governments, although there is not now so strong a tendency to part with it as there was a generation since. The public ownership of forests, on the other hand, is everywhere increasing.

Public Industries.—Industries, except those of a monopolistic nature, have not, as a rule, succeeded well as Government undertakings. *Model* industrial establishments may, however, be managed by Governments with good results. Some very important industries, such as the manufacture of fine china, have had their origin in Government establishments. Natural monopolies may be made to yield a large part of ordinary revenue, especially in great cities, but manufacturing industries that are suited for competition should be left in private hands.

Public Loans.—Public loans are a source of revenue giving rise to public debts. Great national debts are comparatively new in the world's history. Indeed, their origin is as recent as the reign of William and Mary over England. How important they have become in recent times may be judged from the following passage in Professor H. C. Adams' work on *Public Debts*: "The civilised governments of the present day are resting under a burden of indebtedness computed at 27,000,000,000 dollars. This sum, which does not include local obligations of any sort, constitutes a mortgage of 722 dollars upon every square mile of territory over which the burdened governments extend their jurisdiction, and shows a *per capita* indebtedness of 28 dollars upon their subjects. . . . At the liberal estimate of one and a half dollars per day, the payment of accruing interest at 5 per cent. would demand the continuous labour of three millions of men." On the whole public debts have increased largely in the twenty-five years or more that have elapsed since the publication of Professor Adams' book. About 1907 the debt of Austria amounted to 400 million pounds, of France to

1,230 millions, of the German Empire to 193 millions, and of Prussia alone to 390 millions, of Russia to 873 millions, of Spain to 376 millions. In 1906-7 that of Italy was 558 millions. In 1903-4 the total debt of the United Kingdom was £798,349,190. In 1913-14 it was £716,255,421 ; or £15·56 per head of the population. Of this the Funded Debt was £593,453,887, Terminable Annuities accounted for £31,514,908, and the Unfunded Debt for £36,500,000, making altogether for the Dead Weight Debt £661,473,765.

Fees and Special Assessments.—Fees and special assessments closely resemble taxes, but they are of much less significance in the fiscal system. A fee is a “*payment made to the State on the occasion of some specific service rendered by the State to the citizen—the service, however, being non-commercial in character.*” The payment demanded for registering a deed is a fee ; so, also, is any court charge, or a charge for a birth certificate, a marriage license, etc. A special assessment, which is even more like a regular tax, has been defined as “*a compulsory contribution, levied in proportion to the special benefits derived, to defray the cost of a specific improvement of property, undertaken in the public interest.*” Thus American cities often provide for the paving of particular streets by laying part of the cost upon the entire municipality in the form of a tax, and placing the remainder of the burden, in the form of a special assessment, upon the owners of “abutting” properties in proportion to the value of such properties. In this way the entire city pays for the benefit conferred upon the city, while the people living on the street or owning business property there pay for the special benefit which the improvement has

conferred upon them. The custom of municipal improvement by special assessment has been developed much further in the United States than in Europe, although the principle is not unknown in English Local Taxation.

Taxes.—The most important and most regular source of public revenues is taxation. *Taxes are one-sided transfers of valuable things, exacted by public authority, chiefly from citizens, but also from other persons within its reach, according to some general rule, in order to meet public expenses and to accomplish other public ends.* Taxes differ from fees and special assessments, therefore, chiefly in the fact that there is no attempt to adjust the tax to the benefit conferred upon the individual. The justification of taxation lies simply in the necessity of maintaining the State. If the people are to have a State they must pay for it, and no better means than taxation has yet been discovered. In local rating, however, the idea of benefit received by the ratepayer from the expenditure to which he compulsorily contributes is not set aside.

What is a Just Tax?—No question regarding taxation has been more earnestly discussed than the question of deciding what constitutes justice in taxation. One answer still returned is that taxes should be proportioned (1) to *benefits derived*. But it is utterly impracticable to say what proportion of the general benefits of Central Government at any rate accrue to particular individuals. And even, if it were practicable, it would probably be found in many cases that the greatest benefits are enjoyed by the weak and the poor, who are least able to bear the burden of taxation.

The Faculty Theory.—A theory more generally accepted by economists to-day is that taxation (2) should be proportioned to "*faculty*," or *ability to pay*. But even when this rule has been accepted the difficult question remains, How is faculty to be measured? One answer has been that we may measure ability by (a) *consumption*; but it is evident that the consumption of the poor is out of all proportion to their ability to bear the burdens of the State. Another suggested basis of measurement (b) is *property*; but property differs widely in its productiveness, and, moreover, many persons with little property have large incomes and therefore exhibit great ability to bear taxation.

Perhaps the least objectionable measure of ability is afforded (c) by *revenue* or *income*, although even then we must note that incomes differ in permanence and in security, and equal incomes are required to support very unequal numbers of individuals. It is not possible, probably, to reach a single basis of apportionment of the tax burden which would be completely just; but the levying of taxes on income or revenue, with variations to correct manifest cases of inequity, probably approaches as near to the ideal as would be possible to-day.

Granting this, another question at once presents itself for solution. Shall taxes *be laid in direct proportion to revenue*, or shall the rate *be increased as the amount of revenue increases*? The first method is called (a) *proportional taxation*; the second, (b) *progressive or graduated taxation*. Sometimes taxes are neither proportional nor progressive, but (c) *regressive*; that is, *the rate diminishes as the taxed property or revenue becomes larger*. Such taxes most people admit to be

unjust, although such taxes are levied ; but there is no general agreement about the relative justice of proportional and progressive taxation. We cannot enter into a detailed discussion of the question, but must leave the further study of the subject to the student. While the progressive tax seems preferable as an ideal, certain practical difficulties make it very doubtful whether we can hope for the full realisation of the ideal.

Land Nationalisation and Land Municipalisation.—A considerable number of intelligent citizens in England, Australia, and the United States are adherents and devoted advocates of a scheme for entirely abolishing taxation, as that word is ordinarily understood. Mr. Henry George, author of *Progress and Poverty*, a man of earnest human sympathies, and of very strong and sincere convictions, gave the latter part of his life to the advocacy of the plan, which he himself did much to formulate and popularise in modern times. We can do no better, therefore, than explain the proposed system in Mr. George's own language, as given in his paper, the *Standard* :—

The *Standard* advocates the abolition of all taxes upon industry and the products of industry, and the taking, by taxation upon land values, irrespective of improvements, of the annual rental value of all those various forms of natural opportunities embraced under the general term, Land.

We hold that to tax labour or its products is to discourage industry. We hold that to tax land values to their full amount will render it impossible for any man to exact from others a price for the privilege of using those bounties of nature in which all living men have an equal right of use ; that it will compel every individual controlling natural opportunities to utilise them by employment of labour or

abandon them to others ; that it will thus provide opportunities of work for all men, and secure to each the full reward of his labour ; and that as a result involuntary poverty will be abolished, and the greed, intemperance, and vice that spring from poverty and the dread of poverty will be swept away.

The proposition is here definitely made that the State shall take all the pure or economic rent of land, and the claim is made in explanation and justification of this policy that it will abolish poverty. Such a policy might, indeed, prevent landowners who do not care to use their land from withholding it from those who would use it ; but how it would produce all the other blessings predicted it is difficult for most people to comprehend. In the first place, it is hard to imagine how pure economic rent of *agricultural* land can be separated in practice from the annual value of the separable improvements on the land. But, apart from this difficulty, the appropriation of economic rent by the public without compensation to the owners will probably never appeal to the conscience of the public as a righteous policy. No abstract reasoning, based on "natural rights," will persuade a modern nation to take so drastic a step. This policy, honestly and earnestly advocated, is only one more illustration of the danger of basing social reasoning on any theory of "natural rights."

Some advocates of the "single tax" recognise the unwisdom or injustice of appropriating all rents now existing, and therefore propose to compensate present holders of the land. The State in that case would gain only the future increments in value which increasing population may be expected to produce.

In cities, indeed, it may be easier to separate the pure economic rent from the earnings of improvements, like buildings. In actual fact, it has been pertinently contended, such a separation is sometimes made in the United States, and the general idea has been embodied in recent legislation in England. Moreover, it is in cities that the principal evils attendant on private landholding are discovered. Therefore the objections to land *nationalisation* do not apply in the same degree to land *municipalisation*. Many who will reject the one may favour the other. Even here, however, we must proceed very cautiously. Confiscation, at any rate, should not be tolerated. If great and costly changes in this direction should recommend themselves to the people, the burden of the change should be distributed throughout the community.

Direct and Indirect Taxes.—In concluding our discussion we have still to note a distinction, frequently made in economic writings, between *direct* and *indirect* taxation. The meaning attributed to these terms at different times and by different writers has varied widely, but a common definition is that *direct taxes are taxes laid by the State upon those who are expected to bear the burden of them*, while *indirect taxes are expected to be shifted to other persons*. Poll taxes, property taxes, and death duties are usually called direct, while customs and excise are called indirect. The importer of goods subject to duty pays the tax, but recoups himself from the enhanced price which he is able to charge the consumer of the goods. Close analysis of the problem has led many writers to doubt whether the distinction is, after all, real, since in many cases taxes which at first sight seem to be direct, prove to be

regularly shifted. We cannot enter into a discussion of this subject in a work like the present ; but, inasmuch as the terms are frequently employed, it is well to know how the words are commonly interpreted.

As taxation is the most important single subject in the domain of Public Finance, we shall present a more detailed treatment in the following chapter, in connection with the Revenues of the United Kingdom.

SUMMARY

1. Public Finance treats of the revenue and expenditure of Government.
2. Government business is everywhere the largest single business, and profoundly influences all private business.
3. The importance of Government business, and hence of public finance, depends upon the dominant idea of the proper economic functions of Government.
4. Public expenditure in civilised States has been rapidly increasing, owing both to the great growth of population and to the widened scope of Government activity.
5. Public expenditure is incurred for fulfilling the protective, the commercial, the developmental, and the self-sustaining functions of Government.
6. Public revenues are derived from public domains and industries, from fees, special assessments, and taxes, from fines, gifts, etc., and from public loans.
7. Taxes, the chief source of revenue, are compulsory payments for Government expenses.
8. A just tax is one which conforms to the ability of the taxpayer to bear the burden.
9. Land nationalisation, a proposed plan of taking all the economic rent of agricultural land for the support of the State, is impracticable, and, unless compensation is guaranteed, it is morally indefensible ; land municipalisation, the proposal to take the economic rent of urban property, stands on a footing somewhat different.

10. The distinction between direct and indirect taxes is not plain nor perhaps very valuable.

QUESTIONS

1. What is public finance ? From what should it be distinguished ?
2. What is the bearing of public finance upon the labour problem ?
3. What view of the economic functions of Government is held by the anarchist ? By the extreme individualist ? The socialist ?
4. Why has public expenditure increased so uniformly during the last century ?
5. Classify public expenditures, and name particular kinds of expenditure falling under each group.
6. What classes of expenditure have shown the most rapid increase in the last century ?
7. What are fees ? Special assessments ? Taxes ? What are the differences among them ?
8. How do revenues from loans differ from other revenues ?
9. What is the justification of taxation ? What are the theories regarding just taxation ?
10. What is land nationalisation ? Land municipalisation ? What is the difference between them ? Discuss the justice and the practicability of these proposals.

LITERATURE

- H. C. Adams' *Public Debts*.
C. F. Bastable's *Public Finance*.
E. R. A. Seligman's *The Income Tax, Essays in Taxation, and The Shifting and Incidence of Taxation*.

CHAPTER II

REVENUES IN THE UNITED KINGDOM

I. CENTRAL GOVERNMENT

THE following table shows the chief items of revenue classified by their sources for the fiscal year 1913-14 in the Budget submitted by the Chancellor of the Exchequer to Parliament in April, 1913 :—

Customs	-	-	-	-	£35,200,000
Excise	-	-	-	-	38,850,000
Estate, etc., duties	-	-	-	-	26,750,000
Stamps	-	-	-	-	9,800,000
Land tax	-	-	-	-	700,000
House duty	-	-	-	-	2,000,000
Income-tax	-	-	-	-	45,950,000
Land Value duties	-	-	-	-	750,000
Total tax revenue	-	-	-	-	<u>£160,000,000</u>
Postal service	-	-	-	-	£21,125,000
Telegraph service	-	-	-	-	3,150,000
Telephone	„	-	-	-	6,350,000
Crown Lands	-	-	-	-	530,000
Suez Canal shares and Sundry Loans					1,370,000
Miscellaneous	-	-	-	-	2,300,000
Total non-tax revenue	-	-	-	-	£34,825,000
Total tax revenue	-	-	-	-	160,000,000
Sum to be taken from Exchequer					
Balances for shipbuilding arrears					
of 1911-12 and 1912-13	-	-	-	-	1,000,000
					<u>£195,825,000</u>

Non-Tax Revenue.—Of the items included under this heading the first three, amounting together to £30,625,000, are confronted on the other side of the Budget account by an expenditure on Post Office Services of £24,366,000, and accordingly the net receipt from this source is some six million pounds. While the Post Office shows a profit, the Telegraph Service has resulted in a loss. But it has been rightly held that the more correct and less obscure mode of presenting the figures is to give gross rather than net receipts. Similarly, Customs and Excise and Inland Revenue (which includes the remaining heads of the tax revenue) figure for £4,533,000 on the expenditure side of the national balance sheet. The Suez Canal shares were purchased for political reasons by Disraeli when Prime Minister in 1875; they have become a source of revenue. The Crown Lands once belonged to the Sovereign, who now receives from Parliament a specified sum under the title of the Civil List. Miscellaneous revenue consists of various sums, such as receipts from the Mint, the Bank of England, the National Gallery, and the “conscience money” mentioned before.

Tax Revenue.—The first two items here would be commonly described as *indirect*, and the others as *direct* taxation. Gladstone maintained that an even balance should, if possible, be kept between these two varieties of taxation, and spoke of them as “two attractive sisters” of “ample fortune” to whom a Chancellor of the Exchequer should “pay his addresses with impartiality.” In 1886-7 the proportion observed was 54·4 per cent. of indirect, against 45·5 direct. In 1890-1 the figures were 55·9 indirect and 44 per cent.

direct, but twenty years afterwards the scales inclined the other way in a marked degree. The distinction, we saw, is not easily made with precision, for the older writers held that the burden of a tax will be diffused through the community under the influence of competition ; and, accordingly, they investigated the probable " incidence " of taxes upon rent, upon profits, and upon wages, which would be classified as direct. But " indirect " taxes are in common speech considered to be those which are intended to be shifted wholly or in part from the persons from whom they are collected by the revenue authorities to others, and taxes on commodities, like customs and excise, form the bulk of these, although in actual fact the amount of the shifting which takes place may vary according to varying circumstance. Customs are duties levied upon imports, excise are duties raised from home products, and the free trader holds that, where foreign goods enter into competition with goods produced within the country, a customs tax should be balanced by an equivalent excise duty to preserve neutrality of treatment and avoid protection. The duties should be imposed for considerations of " revenue " alone.

Customs Taxes.—Customs duties are either *specific* or *ad valorem*. *Specific duties* are duties laid in proportion to weight or number, without regard to value, while *ad valorem duties* are levied in proportion to the value of the commodities imported. *Ad valorem* duties are open to the objection that they offer a greater temptation to fraudulent valuations, and hence make more difficult the work of the customs officers. *Specific duties*, on the other hand, while they can be more easily administered, are liable to the serious disadvan-

tage that they impose a burden relatively heavier upon less valuable goods of any class. Owing to their greater ease of collection, however, such specific duties now play the greater part in our tariff system, which consists in the main of a few duties of low amounts charged on a small number of commodities largely consumed. In this way a vast revenue is collected without encouraging smuggling or obstructing trade.

Yet, although long use and practical convenience have given customs duties a large and secure place in most financial systems, there are certain evident objections to such taxation which must be borne in mind by the student. These objections call for explanation.

Objections to Customs Duties.—1. *Their Regressive Character.* First of all, it is a criticism on such taxes that they are “regressive” in character. Customs duties, to yield a large revenue, must be levied upon goods of very general consumption. But it is precisely on such commodities that people of moderate wealth spend a greater proportion of their income than the rich. Therefore the tax is regressive; it lays a disproportionate burden upon the poor and those of humbler means.

2. *Effect upon Industry.* In the second place, such taxes, if they are “protective,” seem to interfere with what may be regarded as the “natural” disposition of the nation’s labour and capital. It is not easy to remove all protective influence whatsoever. If protective, such a tariff takes more from consumers than finds its way into the treasury, for the imported goods alone yield revenue, while all, both imported and domestic, are sold at a higher price to the consumer. If the tax be not protective, to meet the requirements of the revenue goods must be brought in at

certain ports or made in certain ways, so that customs and excise officials can inspect and see that the State is not defrauded; and, even with the system of bonding, where commodities are placed in bonded warehouses, from which they are only removed and pay the tax when they are about to be sold, some interval must elapse between the payment and its recovery in the price charged to the consumer, and some interest must be lost on the capital locked up for that period.

3. *Inelasticity.* The two objections just explained are based largely upon social and industrial considerations. A third objection is directly financial in its nature. One mark of a good tax is its elasticity. Few taxes, perhaps, are more inelastic than customs duties. Frequent changes of tariff rates are fatal to that stability of industrial conditions without which business cannot prosper. Unusual demands upon the Exchequer cannot therefore be met advantageously by constant changes in the tariff schedules.

4. *Uncertainty.* And hence results a fourth objection, also financial in character. It is a serious defect of such taxes that they are likely to yield least when the need of a Government is greatest. A war, calling for unusual expenditure, is certain to curtail international trade and hence the revenue from customs duties. Recurrent industrial depression affects most seriously a Government's receipts from this source.

As we have already said, in spite of these serious failings in customs duties, long-established usage and the great fiscal needs of modern Governments are certain to secure a prominent sphere for this form of taxation for a long while to come. Meantime, nations usually seek to compensate for these objections by

supplementing their customs duties by other forms of taxation.

Excise Taxes.—One such form is that of excise taxes. *Excise duties or taxes are those levied directly upon certain classes of goods produced within the country.* In former times these taxes were bitterly opposed, and very little revenue was derived from so unpopular a source. The term was also once applied to duties on foreign as well as those on domestic goods. Our Government by this means now secures revenues exceeding in amount those obtained from customs duties. The method of collecting both the customs and the excise has been shaped into a simple and effective system. The latter, like the former, are not designed to be protective, but are raised for “revenue” alone. Being indirect they are intended to be shifted. Dr. Johnson, however, described excise as a “hateful tax levied upon commodities.” They are open to most, if not all, of the objections noted before as raised to customs duties, but, like those, they will probably form a considerable part of the national revenues for a long time to come. In fact, if the poor are to contribute to taxation, it is by such means that they can be most conveniently and effectually approached; and in some cases, as in that of the taxation of liquor, they may have a moral as well as a sumptuary aim, and be intended not merely to check wasteful or extravagant expenditure, but also to restrain conduct injurious to health and character.

Estate Duties.—On the other hand, the next item of revenue to be considered is designed to fall with especial weight upon the rich. The estate duties comprise the duties levied upon wealth, landed and

personal, passing at death. They have been simplified, with the result that one class of tax, the estate duty, is imposed according to the total amount of wealth left by the deceased, and the other class of tax (the legacy or succession duty, the first charged on personal property and the second on land or real property), is regulated by the amount bequeathed to, or inherited by, each individual legatee or inheritor. In the case of the latter, the amount of the duty varies with the degree of relationship ; in the case of the former the principle of graduation is observed, by which a higher rate of duty is charged as the size of the estate concerned increases. Corporate bodies which never die also pay, with certain exemptions, an annual duty, and it is generally held (*a*) that the transfer of wealth at death is an occasion on which the State may properly step in, and claim a share, without defeating any justifiable expectation on the part of the successors, and (*b*) that such taxation may equitably be graduated and more taken from a large than from a small estate than proportionate taxation would prescribe. But, if the tax be fixed too high, or the scale be too steeply graduated, then gifts during lifetime may evade the tax, or the burden upon income (to provide for the death duties by previous insurance) may be very heavy. In fact, such duties have become a source of revenue which is exceeded alone by customs and excise and by income tax ; and they have been greatly increased during recent years.

Stamps are duties imposed on deeds and other documents, without which they are not of legal validity. Bills of exchange and promissory notes, leases and sales, form the most conspicuous of such instruments,

while the penny stamp on receipts is another variety of this revenue, the burden of which is probably imperceptible. In other instances the tax may act as a hindrance to the smooth conduct of business between members of the community.

Land Tax and Inhabited House Duty.—The first of these is a survival of a tax intended to be levied at the outset on other forms of wealth besides land. From difficulty experienced in its collection it came to be a tax on land alone at a fixed rate. Much of it has been redeemed, and its yield is now comparatively small. The second tax was the outcome of an earlier “hearth” tax paid at a certain rate on every hearth or stove, and of a subsequent “window” tax imposed on houses according to the number of their windows. Some authorities hold that it should properly belong to local, rather than to central or imperial revenue.

Land Value Duties.—These duties, only recently imposed, may be described conveniently before we proceed to a more established source of revenue. They are intended to secure for the State a share in the so-called “unearned increment” of land. They consist of an “increment” duty chargeable upon that increment, an “undeveloped” land duty levied upon land which could be used for building purposes, and is not yet so employed, and a “reversion” duty imposed at the termination of a long lease on the increased value at which the property could be re-let. They are based, in the first two instances, upon a valuation designed to separate the “site value” (which is supposed to represent what is not “earned”); and, until the valuation is complete, the revenue accruing from these duties must be small. Their equity, as applied to

land alone, has been contested, and some critics think that, justly appraised, these duties can never be very lucrative. Their principle has been broadly discussed in the preceding chapter in connection with proposals for land nationalisation.

The Income Tax.—The income tax calls for more extensive comment. Originally imposed as a war tax, by Pitt, and viewed with such disfavour by the public at large that its records were destroyed, it was employed by Peel and Gladstone for the passing purpose of filling the gap temporarily caused by their reform of the tariff, when they substituted a few simple duties for the previous mass of complicated peddling taxes on commodities. Gladstone, indeed, held that its inevitable inequalities were such that they could not be remedied ; and he approached very near to its entire abolition. Now it has become a permanent feature of our fiscal system, and later Chancellors of the Exchequer, by distinguishing differences in amounts and kinds of income, claim to have made the tax more fair.

The Income Tax in Practice.—We may then consider the claims advanced for and against this variety of tax. First of all, it should be noted that in England, Italy, Prussia, and other German States in which it has been given a trial, (1) *experience has justified it as a financial instrument*. It is elastic and can be speedily raised or lowered, and this quality strongly recommends its use to Chancellors of the Exchequer. Moreover, it is noteworthy that an income tax (2) *gains in economy and productiveness, and wins increasing approbation as the years pass by*.

The Income Tax in Theory.—In the third place, (3) there is little question that such a tax, assuming it to

be fairly enforceable, *conforms to the ideal* of taxation, *that men should pay* the expenses of the State *in proportion to* their "*faculty*" or ability, for income is the best single mark of such ability. Where the tax is applied uniformly to all kinds of income, (4) *it cannot be shifted easily*, if at all, and in any event, the tax on rent and monopoly privileges of all kinds cannot, it is clear, be shifted. This in itself is a powerful recommendation of the tax.

Exemption.—It is usual to exempt small incomes from such taxation, because possessors of such incomes already pay a disproportionate share of other taxes, and also because the expense of collection of the tax from these people bears too high a proportion to the revenue obtained to be "economical." The principle of graduation has also been introduced in the shape, mainly, of allowing abatements increasing in amount as the amount of income possessed diminishes. But this differentiation takes a "progressive" as well as this "degressive" form where a "super-tax" is charged on incomes above a certain figure. A distinction, too, is made in the rate at which the tax is levied according as the income is "earned" or "unearned."

Practicability.—The question of the possibility of a fair enforcement of such taxation is best answered by experience. The English system provides for the taxation of all incomes grouped into five classes (a) the ownership of land, (b) the occupation of land, being mainly farmers' profits, (c) interest and dividends on public funds, (d) profits and gains of companies and individuals, (e) salaries of public officials. The tax is imposed in the majority of cases "at the source." For example, dividends of a company pay the tax before

they are distributed to the individual shareholders. By this means the danger of evasion is minimised, for those who actually pay have no direct motive for cheating the revenue, and, as in the case of a tenant, under Schedule A, they can legally recover the tax from the ultimate payer, who in this instance is the landlord.

Conclusion.—The objection commonly urged against such taxation is that it is inquisitorial. But taxation “at the source” avoids this drawback where it is feasible; although elsewhere reliance must be placed upon the returns of the taxpayers, who may be tempted to dishonesty if the revenue officers have not powers of strict investigation.

II. LOCAL REVENUES

Local areas of administration in some countries have relied in the main upon the same taxes as those levied by the central Government. Local authorities have been allowed to charge additions to the taxes raised for the Imperial Exchequer, and to take these quotas for their purposes. But in England the chief source of local revenue has been a rate levied from occupiers on the houses or “hereditaments” of which they are the tenants. This was the basis of assessment of the poor-rate of Elizabethan times, which was the origin of other rates. But at the first it was contemplated in this case, as in that of the land tax described before, that other kinds of wealth should be rated; and they escaped eventually because it was not easy to discover and assess them and make them pay. The house, by contrast, was visible, and it did not seem to be an inequitable test of the occupier’s “ability to pay.” It also appeared to be a rough and ready

measure of the "benefit received" from the expenditure of local authorities where that benefit could be reasonably allotted. Economists have discussed the difficult problem of the ultimate incidence of such rates; and it has been held that the burden probably rests in part, so far as the structure of the house is concerned, on the occupier, who is in the position of a consumer of a commodity and must pay the market price to the builder, so that he may not be damnified, but that, so far as relates to the site, the weight is likely to be shifted, when opportunity occurs, at the end of a lease, to the landlord.

Grants-in-Aid.—It is, however, a general principle established in taxation that a "single" tax is likely to be unjust, while in a composite system of taxation an inequality in one direction can be compensated or corrected by an inequality of another kind. At any rate, the practice has arisen of making "grants-in-aid" from the Imperial Exchequer (to which personal wealth as well as landed property contributes) to local authorities to meet part of some of their expenditure. The system at one time took the form of the appropriation of the proceeds of certain taxes, but it has generally in England assumed the shape of grants from the Consolidated Fund. It has been urged that a distinction should be drawn either (*a*) between the "onerous" and the "beneficial" expenditure of local authorities, the latter of which brings definite benefit to the locality, and should therefore be locally defrayed, or (*b*) between expenditure for "national" and for "non-national" objects, the former of which alone should be assisted by grants from the central Government. It has also been contended that the system of "grants-in-aid," which

probably arose and has developed haphazard under pressure of emergency, might be utilised more systematically than before to bring local bodies up to a standard set by the central authority.

The Growth of Local Expenditure.—The “net expenditure” of local authorities in England and Wales in 1911-12 “met from rates and grants” was estimated at £54,869,000, of which £28,615,000 was devoted to educational purposes, and the remainder to poor relief, lunatic asylums, main roads, police prosecutions, salaries of sundry officials. While in 1889-90 the “gross expenditure” was some 20 millions, in 1911-12 it was three times larger. The sums annually granted from the Imperial Exchequer for the relief of local taxation have greatly increased. The “local taxation account” on the receipt and the expenditure side of the Budget balance sheet, representing sums derived from certain sources handed to local bodies, doubled within the fifteen years or so between 1890 and 1905. But the work of local bodies has also undergone large development. Some of the undertakings in which, willingly or compulsorily, they have engaged, borrowing money for the purpose, might justly be styled productive, although their indebtedness has grown from £237,881,338 in 1890-91 to £380,583,714 in 1900-1901, and again to £629,635,160 in 1910-11, when it amounted to £14·02 per head of the population of the United Kingdom. In 1902, in England and Wales alone, 193 town councils owned waterworks, 97 possessed gasworks, 102 supplied electricity, and 45 worked or owned tramways; and other reproductive undertakings included harbours, piers, docks, municipal dwellings, markets, canals, ferries, and even a race-

course. In that year the total capital provided for such reproductive purposes was £121,172,372. The average income was estimated at £13,040,711; the average expenditure (for working expenses, interest and repayment of loans and depreciation fund) was £12,662,430, giving thus a net profit of £378,281. The receipts of local bodies in England and Wales for 1902-03 were derived from the following sources :

Public rates.	Cemeteries, baths, museums,
Exchequer contributions.	asylums, etc.
Tolls and dues.	Private improvement rates.
Fees, fines, and penalties.	Rents.
Municipal enterprises.	Sales of property.
	Other receipts.

and amounted to nearly 94 millions, of which Public rates yielded 50 millions and Exchequer contributions some 13 millions. Loans provided some 34 millions, and the total receipts were 129 millions. By 1911-12 they had become 154 millions.

SUMMARY

1. The revenues of the central Government are derived in part from the customs and excise ; the other sources are estate duties, stamps, and income tax, besides non-tax revenues. A distinction has been drawn between "direct" and "indirect" taxation. Of the non-tax revenues the post-office receipts are most important.
2. Customs duties are regressive, inelastic, and uncertain, and disturb business ; but their productiveness gives them a strong place in a financial system.
3. Excise taxes under a system of free trade should be equivalent to customs duties.
4. Estate duties also raise a large revenue, and are graduated.
5. The land tax and inhabited house duty are old taxes while the duties on land values are new levies.

6. The income tax is theoretically a just form of taxation, although objections have been raised to it.
7. Local authorities now rely mainly on rates placed upon houses.
8. But "grants-in-aid" from the Imperial Exchequer are made to defray a part of certain kinds of local expenditure which as a whole is continually growing.

QUESTIONS

1. Of what chief items does the non-tax revenue of the United Kingdom now consist? Of what does the tax revenue? Can a distinction be drawn between direct and indirect taxation?
2. What are specific duties? *Ad valorem* duties?
3. State and explain the objections to customs duties.
4. Justify death duties. Should they be graduated?
5. Distinguish between the land tax and the duties on land values.
6. Discuss the advantages of an income tax; and its disadvantages.
7. How is the expenditure of local bodies met?

LITERATURE

- S. Buxton's *Finance and Politics*.
 E. Cannan's *The History of Local Rates in England*.
 H. Higgs' *The Financial System of the United Kingdom*.
 B. Mallet's *British Budgets, 1887-1913*.

APPENDIX I

SUBJECTS FOR ESSAYS AND DISCUSSIONS

THE following list is intended simply to be suggestive. Students are advised in the first place to choose such subjects for their study as are suited best to their local surroundings. Thus, the student living in a rural district should study such subjects as local land values, agricultural rents, farming methods and their changes, the size of holdings, the business capacity of farmers, the use of machinery, transport of produce, agricultural societies, etc., all with reference to the special neighbourhood. If he or she lives in a manufacturing town, let them examine in the same way the factory problem,—the extent to which women and children are employed, their wages and their hours of labour, the means of preventing or adjusting quarrels between employers and employed, etc.; or let them investigate the local railway problem,—fares and rates, precautions for safety, accidents, etc.

It need scarcely be said that, in selecting subjects for debate from the following list, care should be exercised, and only those topics should be chosen which permit of a real affirmative and negative, and the question should be framed in such a way that the two sides may be well balanced.

BIOGRAPHICAL AND PERSONAL

(Especially for Essays)

The Life of Adam Smith.

The Work of Robert Owen.

Arnold Toynbee and Social Reform.

Karl Marx as Theorist and Historian.

Henry George and the Single Tax.

LABOUR AND LABOUR ORGANISATIONS

The Sweating System.

The Cost of Children's and Women's Labour.

The Economy of High Wages.

The History and Prospects of Profit-sharing and Industrial Partnership.

Co-operation in Theory and Practice.

Working men's Budgets.

Labour Organisation.

Compulsory Arbitration.

Factory Legislation.

Strikes.

The Power of Consumers over Conditions of Employment.

Combinations of Employers and Employees against the Public.

LAND AND FOOD SUPPLY

Agricultural Conditions in England during the Nineteenth Century.

Extensive and Intensive Farming.

Small Ownerships and Small Holdings.

Co-operation in Agriculture.

The Causes and Results of Inclosure.

MONEY, BANKS, AND BANKING

Money in Various Places and Times.

National and International Bimetallism.

The Possibilities and Dangers of Paper Money

The English Banking System.

The Use and Abuse of Credit in Modern Trade.

Usury and Usury Laws.

The History of the Bank of England.

COMMERCE, MONOPOLIES, ETC.

Shipping Subsidies.

The Stock Exchange and its Relations to Industry.

Commercial Crises.

Monopolies, Old and New.

Trusts, What they are and what they do.

Municipal Trade.

The Economy and Waste of Advertising.

TRANSPORT

The Prussian Railway System.

Railway Combinations and Amalgamations.

How Railway Rates and Fares should be Determined.

SOCIAL PROBLEMS

The Influence of Luxury upon Rich and Poor.

Housing Problems in Large Cities.

The Economic and Moral Causes of Poverty.

The Organisation of Charity.

Immigration and Social Standards.

Poor Law Reform.

TAXATION AND TARIFFS

Adam Smith's Maxims of Taxation.

The Incidence of Taxation.

The English Corn Laws.

Death Duties.

Reciprocity, Free Trade, and Protection.

The Taxation of Land Values.

THE STATE IN INDUSTRY

Four Views of the Economic Functions of Government :

Anarchism, Extreme Individualism, Moderate Individualism, Socialism.

The Relation of the State to Industry in (a) England and (b) Germany.

The Post Office as a State Department.
 National Workshops in France in 1848.
 Ideal Commonwealths.
 Christian Socialism.
 The Fabian Socialists.
 Socialistic Experiments.
 The Social Democratic Party in Germany.
 Are we tending toward Socialism ?
 Socialism or Social Reform, Which shall it be ?
 Liberty of Thought and Speech in the Socialistic State.

GENERAL THEORY

The Theory of Value as stated by Marshall.
 The Malthusian Theory of Population.
 The Theory of a Wage-Fund.
 Money and the Balance of Trade.
 A Study of Human Wants.
 Possible Substitutes for Competition.
 Profits : What are they and how are they determined ?
 Developments of the Idea of Rent.
 What are Economic Laws ?
 The Quantity Theory of the Value of Money.

MISCELLANEOUS

The Economic Results of the Great Plague of 1348.
 What bad Cooking is, and what it costs.
 The Economic Functions of the Church.
 Changes of Fashion in Women's Clothing.
 A Study in Division of Labour. (To be drawn from the student's observation.)
 An Expensive Luxury. (A careful statistical study of the cost of tobacco or wine to individuals and nations.)
 The Cost of War. (A comparative study of the items in various national budgets due to past wars or to preparation for future wars.)

APPENDIX II

COURSES OF READING

It is believed that both students and teachers may derive aid from the following selected bibliographies. The first group in each case includes works of a character relatively untechnical, and it therefore constitutes a sort of elementary "minimum" course of special study of the particular topic. The books mentioned in the second group are in each case more advanced and technical, and may therefore be used either for advanced courses of study or as works of reference.

GENERAL ECONOMICS

GROUP 1

- Cannan, Edwin : *Wealth, a Brief Explanation of the Causes of Economic Welfare.*
Gide, Charles : *Political Economy.* (English translation, 1914.)
M'Killop, M., and Atkinson, M. : *Economics, Descriptive and Theoretical.*
Seager, Henry R. : *Economics ; Briefer Course.*
Seligman, E. R. A. : *The Principles of Economics.*
Walker, F. A. : *Elementary Course in Political Economy ; also Briefer Course in Political Economy.*

GROUP 2

- Clark, J. B. : *The Distribution of Wealth.*
Marshall, A. : *The Principles of Economics.*
Mill, J. S. : *The Principles of Political Economy.*

392 ELEMENTARY PRINCIPLES OF ECONOMICS

- Nicholson, J. S. : *The Principles of Political Economy*.
Ricardo, D. : *Principles of Political Economy and Taxation*.
(Six chapters in Ashley's Economic Classics.)
Smart, W. : *An Introduction to the Theory of Value*.
Smith, Adam : *Wealth of Nations* (in Ashley's Economic Classics).
Walker, F. A. : *Political Economy*. (Advanced Course.)

ECONOMIC HISTORY

GROUP 1

- Ashley, W. J. : *The Economic Organisation of England*.
Cheyney, E. P. : *An Introduction to the Industrial and Social History of England*.
Ely, R. T. : *Evolution of Industrial Society*.
Hewins, W. A. S. : *English Trade and Finance*.
Price, L. L. : *A Short History of English Commerce and Industry*.
Warner, T. : *Landmarks in English Industrial History*.

GROUP 2

- Ashley, W. J. : *An Introduction to English Economic History and Theory*. 2 vols.
Bücher, Carl : *Industrial Evolution*. (Translation.)
Cunningham, W. : *Growth of English Industry and Commerce*. 3 vols.
Gonner, E. C. K. : *Common Land and Inclosure*.
Meredith, H. O. : *Outlines of the Economic History of England*.
Rogers, J. E. T. : *Six Centuries of Work and Wages and A History of Agriculture and Prices in England*.
Toynbee, Arnold : *The Industrial Revolution*.
Wells, D. A. : *Recent Economic Changes*.

THE HISTORY OF POLITICAL ECONOMY

GROUP 1

- Bagehot, W. : *Economic Studies*.
Price, L. L. : *A Short History of Political Economy in England*.

GROUP 2

Ashley, W. J. (editor): *Economic Classics*, including selected passages from Adam Smith's *Wealth of Nations*; six chapters of Ricardo's *Principles of Political Economy*; parallel chapters from Malthus's *Theory of Population*; Mun's *England's Treasure by Foreign Trade*; Jones' *Peasant Rents*; and Schmoller's *The Mercantile System*.

Gide, C., and Rist, C.: *History of Economic Doctrines*. (English Translation.)

Haney, L. H.: *History of Economic Thought*.

Ingram, J. K.: *A History of Political Economy*.

RENT, LAND NATIONALISATION, AND THE SINGLE TAX

GROUP 1

George, Henry: *Progress and Poverty*.

Walker, F. A.: *Land and its Rent*.

GROUP 2

Clark, J. B.: *The Distribution of Wealth*.

Hobson, J. A.: *The Industrial System*.

Smart, W.: *The Distribution of Income*.

MONEY, CREDIT, AND BANKING

GROUP 1

Bagehot, W.: *Lombard Street*.

Clare, George: *A Money Market Primer*.

Jevons, W. S.: *Money and the Mechanism of Exchange*.

Walker, F. A.: *Money, Trade, and Industry*.

Withers, Hartley: *The Meaning of Money*.

GROUP 2

Andreades, A.: *History of the Bank of England*. (English Translation.)

Bisschop, W. R.: *The Rise of the London Money Market, 1640-1826*.

Conant, C. A.: *A History of Modern Banks of Issue*.

- Dunbar, C. F. : *The Theory and History of Banking.*
 Fisher, I. : *The Purchasing Power of Money.*
 Gilbert, J. W. : *The History, Principles, and Practice of Banking.*
 Keynes, J. M. : *Indian Currency and Finance.*
 Nicholson, J. S. : *Money and Monetary Problems.*
 Rae, G. : *The Country Banker.*
 Sumner, W. G. : *A History of American Currency.*
 Walker, F. A. : *International Bimetallism.*

PUBLIC FINANCE

GROUP 1

- Plehn, C. C. : *Introduction to Public Finance.*

GROUP 2

- Adams, H. C. : *The Science of Finance.*
 Bastable, C. F. : *Public Finance.*
 Cannan, E. : *The History of Local Rates in England.*
 Cohn, G. : *The Science of Finance.* (Translation.)
 Ely, R. T., and Finley, J. H. : *Taxation in American States and Cities.*
 Seligman, E. R. A. : *Essays in Taxation and The Income Tax, and The Shifting and Incidence of Taxation.*

INTERNATIONAL TRADE AND PROTECTIONISM

GROUP 1

- Bastable, C. F. : *The Theory of International Trade and The Commerce of Nations.*
 Bastiat, F. : *Sophisms of Protection.*
 Byles, J. B. : *Sophisms of Free Trade and Popular Political Economy Examined.*
 Clare, G. : *The A B C of the Foreign Exchanges.*
 Ely, R. T. : *Problems of To-day.*
 Taussig, F. W. : *The Tariff History of the United States.*

GROUP 2

- Ashley, W. J. : *The Tariff Problem.*
 Buxton, S. : *The Arguments on either side of the Fiscal Question.*

- Cunningham, W. : *The Case against Free Trade.*
 Hobson, J. A. : *International Trade.*
 List, F. : *The National System of Political Economy.* (Translation.)
 Nicholson, J. S. : *A Project of Empire.*
 Patten, S. N. : *The Economic Basis of Protection.*
 Pigou, A. C. : *The Riddle of the Tariff.*
 Wells, D. A. : *Practical Economics.*

SOCIALISM

GROUP 1

- Bellamy, E. : *Looking Backward.*
 Brooks, J. G. : *The Social Unrest.*
 Ely, R. T. : *Socialism and Social Reform.*
 Reeves, W. P. : *State Experiments in Australia and New Zealand.*

GROUP 2

- Ensor, R. C. K. : *Modern Socialism.*
 Estey, J. A. : *Revolutionary Syndicalism.*
 Kirkup, T. : *A History of Socialism.*
 Macdonald, J. R. : *The Socialist Movement and Socialism and Society.*
 Mallock, W. H. : *A Critical Examination of Socialism.*
 Marx, Karl : *Capital.* (Translation.)
 Rae, J. : *Contemporary Socialism.*
 Schäffle, A. : *The Quintessence of Socialism.* (Translation.)
 Skelton, J. : *Socialism : a Critical Analysis.*
 Sombart, Werner : *Socialism and the Social Movement.* (Translation.)

LABOUR; ITS POSITION, ITS CONDITIONS, AND ITS EARNINGS

GROUP 1

- Ely, R. T. : *The Labor Movement in America.*
 Toynbee, Arnold : *The Industrial Revolution.*
 Wright, C. D. : *The Industrial Evolution of the United States.*

GROUP 2

Annual and Special Reports of the Labour Department of the Board of Trade.

Ashley, W. J. : *The Adjustment of Wages.*

Chapman, S. T. : *Work and Wages* (in continuation of Lord Brassey's book).

Fay, C. R. : *Co-operation at Home and Abroad.*

Gilman, N. P. : *Profit-sharing between Employer and Employee.*

Jevons, W. S. : *The State in its Relation to Labour.*

Potter, Beatrice : *The Co-operative Movement in Great Britain.*

Price, L. L. : *Co-operation and Copartnership.*

Price, L. L. : *Industrial Peace.*

Rogers, J. E. T. : *Six Centuries of Work and Wages.*

Schloss, D. F. : *Methods of Industrial Remuneration.*

Shadwell, A. : *Industrial Efficiency.*

Webb, C. : *Industrial Co-operation : the Story of a Peaceful Revolution.*

Webb, Sidney and Beatrice (Potter) : *The History of Trade Unionism and Industrial Democracy.*

MONOPOLIES AND INDUSTRIAL COMBINATIONS

GROUP 1

Ely, R. T. : *Monopolies and Trusts.*

Jenks, J. W. : *The Trust Problem.*

Von Halle, E. : *Trusts and Industrial Combinations.*

GROUP 2

Baker, C. E. : *Trusts and the People.*

Clark, J. B. : *The Control of Trusts.*

Macgregor, D. H. : *Industrial Combination.*

Macrosty, H. W. : *The Trust Movement in British Industry.*

TRANSPORTATION

GROUP 1

Acworth, W. M. : *The Elements of Railway Economics.*

Hadley, A. T. : *Railroad Transportation.*

Knoop, D. : *The Outlines of Railway Economics.*

GROUP 2

- Jeans, J. S. : *Waterways and Water Transport*.
Report of the United States Industrial Commission.
Ripley, W. Z. : *Railway Problems*.

COMMERCIAL GEOGRAPHY

GROUP 1

- Lyde, L. W. : *Man in Many Lands*.

GROUP 2

- Chisholm, G. G. : *A Handbook of Commercial Geography*.

In addition to the books mentioned in the preceding paragraphs, students will find certain general works of reference of great value. These may be most conveniently arranged under the headings : dictionaries, periodicals, and general treatises. Every institution that aspires to the command of a working library should possess all or most of the books in the following list, together with some of the magazines of most general use in the subject. The student will not find any references to German, French, or Italian authorities that have not been translated. Should he have occasion, in exceptional cases, to refer to such works, he should consult the bibliographies which are found in many of the general treatises included in the list.

DICTIONARIES

Dictionary of Political Economy. Edited by R. H. Inglis Palgrave.

A Dictionary of Statistics. By A. Webb.

The standard encyclopædias will also be found to contain special articles on very many economic topics.

PERIODICALS

The Economic Journal.

The Economic Review.

The Publications of the American Economic Association.

The Quarterly Journal of Economics.

The Political Science Quarterly.

The Journal of Political Economy.

The Annals of the American Academy of Political and Social Science.

The Journal of the Royal Statistical Society.

The Journal of the Bankers' Institute.

GENERAL TREATISES

Bullock, C. J. : *An Introduction to the Study of Economics.*

Cannan, E. : *Elementary Political Economy and Wealth.*

Ely, R. T. : *Outlines of Economics ; also Introduction to Political Economy.* (Revised Edition, 1901.)

Gide, C. : *Political Economy.* (Translation.)

Hadley, A. T. : *Economics.*

Hearn, W. E. : *Plutology.*

Marshall, A. : *The Principles of Economics and The Economics of Industry.*

Mill, J. S. : *The Principles of Political Economy.* (Ashley's edition.)

Nicholson, J. S. : *The Principles of Political Economy.*

Pierson, N. G. : *The Principles of Economics.* (Translation.)

Roscher, W. : *Political Economy.* (Translation.)

Seager, H. R. : *The Principles of Economics.*

Seligman, E. R. A. : *The Principles of Economics.*

Sidgwick, H. : *The Principles of Political Economy.*

Taussig, F. W. : *The Principles of Economics.*

Walker, F. A. : *Political Economy.* (Advanced Course.)

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